IJAER/September-October 2024/Volume-13/Issue-4 ISSN: 2278-9677
International Journal of Arts & Education Research
(Peer-Reviewed, Open Access, Fully Refereed International Journal) Impact Factor:7.06

IMPACT OF ONLINE LEARNING ON STUDENT ENGAGEMENT AND ACADEMIC PERFORMANCE

Md. Sharif Ahmad
Asst.prof. of Education
MM Rahmani B.Ed. College
Damodarpur, Begusarai, Bihar

Abstract

The advent of technology has revolutionized the way we learn. Online learning, once a novelty, has become a ubiquitous part of modern education. This shift has raised questions about its effectiveness in fostering student engagement and academic performance. While online learning offers flexibility and accessibility, it also presents unique challenges that can impact these crucial aspects of education. One of the significant advantages of online learning is its potential to enhance student engagement. The interactive nature of many online courses, coupled with personalized learning paths, can create a more engaging and motivating learning environment. Students can work at their own pace, explore topics of interest in depth, and receive immediate feedback on their work. This autonomy can foster a sense of ownership and responsibility for their learning. Additionally, online platforms often incorporate multimedia elements, such as videos, animations, and simulations, which can make learning more visually appealing and interactive. However, online learning also presents challenges that can hinder student engagement. The lack of face-to-face interaction with teachers and peers can lead to feelings of isolation and a diminished sense of community. The asynchronous nature of online courses can make it difficult to establish a consistent rhythm of learning and may contribute to procrastination. Moreover, technical difficulties and internet connectivity issues can disrupt the learning experience and frustrate students. Learners can access educational materials from anywhere with an internet connection, breaking down geographical barriers. This flexibility allows individuals to balance their education with other commitments, such as work or family. Moreover, online courses often offer a variety of schedules, making it easier for students to find a learning pace that suits them.

Keywords:

Online; Learning; Students; Academic; Performance

Introduction

With the use of adaptive technology, online courses can tailor their content and pace to meet the individual needs of each student. This personalized approach can help students stay engaged and motivated, as they are able to learn at their own pace and focus on areas where they need the most support. Additionally, online learning platforms often offer a variety of resources, such as interactive quizzes, videos, and discussion forums, to enhance the learning experience. (Cabrera, 2021)

Unlike traditional classrooms, where students can interact with their peers and instructors face-to-face, online learning can sometimes feel solitary. While online platforms often provide opportunities for collaboration and discussion, it can be difficult to replicate the social and emotional aspects of in-person learning.

With the proliferation of online learning platforms, it can be difficult for students to distinguish between reputable institutions and those that may not meet the same standards of academic rigor. It is essential for students to research and select online courses from accredited institutions and reputable providers.

In many cases, online courses are more affordable than traditional programs, as they eliminate the need for costly textbooks, campus fees, and commuting expenses. Moreover, online learning can break down geographical barriers, providing access to high-quality education for individuals in remote or underserved areas. For students with disabilities, online learning can offer a more inclusive and accommodating learning environment. (Fernandez, 2019)

One of the most significant trends shaping the future of online learning is the increasing integration of artificial intelligence (AI). AI-powered tools can personalize learning experiences, adapting content and pacing to individual students' needs. Intelligent tutoring systems can provide real-time feedback, identify knowledge gaps, and offer targeted support. Additionally, AI can automate administrative tasks, freeing up educators to focus on more meaningful interactions with students.

Virtual reality (VR) and augmented reality (AR) are also poised to revolutionize online learning. These technologies can create immersive and engaging learning environments, making complex subjects more accessible and interesting. For instance, students can explore historical sites or conduct scientific experiments in virtual labs, gaining a deeper understanding of the material.

Furthermore, the rise of microcredentials and lifelong learning will drive the future of online learning. Microcredentials, such as badges or certificates, allow individuals to acquire specific skills and knowledge,

making them more competitive in the job market. Online platforms will play a crucial role in offering a wide range of micro credential programs, catering to diverse learners' needs and interests.

Online learning provides a wealth of resources. From interactive tutorials and multimedia content to virtual libraries and online communities, learners have access to a vast array of tools to enhance their understanding. Additionally, many online courses incorporate real-world applications, enabling students to develop practical skills that can be immediately applied to their careers. (Thorpe, 2021)

Literature Survey

Kauser et al. (2022): As online learning becomes more prevalent, there will be a growing emphasis on ensuring quality and equity. Accrediting bodies and regulatory frameworks will play a vital role in establishing standards and ensuring that online courses meet rigorous quality benchmarks. Additionally, efforts will be made to bridge the digital divide and ensure that all learners have access to quality online education, regardless of their socioeconomic background.

Soykan et al. (2020): The future of online learning is brimming with exciting possibilities. With the integration of AI, VR, AR, and microcredentials, online learning will become even more personalized, engaging, and accessible. As technology continues to advance, it is essential to prioritize quality, equity, and lifelong learning to ensure that online education benefits learners of all ages and backgrounds.

Dmour et al. (2021): Online learning has the potential to transform the educational landscape by providing flexible, accessible, and personalized learning experiences. While it presents certain challenges, such as isolation and quality concerns, the benefits of online learning far outweigh the drawbacks. As technology continues to advance, we can expect to see even more innovative and effective online learning solutions emerge, shaping the future of education for generations to come.

Fatima et al. (2022): One of the primary concerns is the potential for isolation. Unlike traditional classrooms, online learners may lack face-to-face interaction with their instructors and peers. This can lead to feelings of loneliness and a decreased sense of community. Moreover, self-discipline is essential for success in online learning, as learners must manage their own time and stay motivated.

Objectives of the Study:

i) To study the current trend of online learning

ii) To study the impact of online learning on student engagement

iii) To study the impact of online learning on academic performance

Hypotheses of the Study:

i) There is positive relationship between online learning and student skill

ii) There is positive relationship between online learning and student engagement

iii) There is positive relationship between online learning and academic performance

RESEARCH METHODOLOGY

Sample Size

A total of 100 respondents were chosen from Delhi-NCR. We selected 100 respondents working in different sectors in Delhi-NCR region.

Data Analysis

Regional Distribution of Respondents

Table No.- 1

Regional Distribution of Respondents

S. No.	Area Name	No. of Respondents
1.	**Delhi-NCR**	100
	Total	**100**

Analysis -

The above table shows the regional details of the respondents. For the study, a total of 100 respondents working in Delhi-NCR were selected.

Age

Table no. 2

Age-wise Classification of Selected Respondents

S.No.	Age-Group	Respondents	
		No.	**Percentage**
1.	15-18	27	27
2.	19-22	58	58
3.	above 22	15	15
	Total	**100**	**100**

Analysis:

It is clear from above Table no. 2 that out of total 100 respondents from Delhi-NCR, the age group between 15-18 years were 27 (27 percent) and No. of respondents with age group 19-22 years were 58 (58 percent). On the other hand, there were 15 respondents with age higher than 22.

Table no. 3

Gender Classification of Selected Respondents

S.No.	Gender	Respondents	
		No.	**Percentage**
1.	Male	67	67
2.	Female	33	33
	Total	**100**	**100**

Analysis:

It is clear from above Table no. 3 that out of total 100 respondents from Delhi-NCR, 67 were male and 33 were females.

Interpretation-

The above chart shows the gender percentage of selected respondents in Delhi-NCR. According to which, the percentage of male respondents is 67 and the female ones is 33.

Table 4

Analysis of Respondents on the basis of impact of online learning

S. No.	Do you think that online learning improves knowledge skill?	No.	Percentage
1.	Agree	24	24
2.	Strongly Agree	33	33
3.	Disagree	23	23
5.	Strongly Disagree	17	17
5.	Neutral	3	3
	Total	**100**	**100**

Analysis:

From above table no. 4, it is clear that out of total 100 respondents from Delhi-NCR, 24 respondents agreed that online learning improves knowledge skill while 33 respondents were strongly agreed with this statement. On the other hand, 23 and 17 respondents were 'Disagree' and 'Strongly Disagree' respectively about the that online learning improves knowledge skill . While 3 respondents were neutral about this feedback.

Interpretation

According to which, the percentage of respondents who disagree that online learning improves knowledge skill is 24 percent and those who strongly disagree with this statement are sharing the percentage of 33.

Table 5

Analysis of Respondents on the basis of impact of online learning on student engagement

S. No.	Do you think that online learning improves student engagement ?	No.	Percentage
1.	Agree	65	65
2.	Strongly Agree	28	28
3.	Disagree	4	4
5.	Strongly Disagree	2	2
5.	Neutral	1	1
	Total	**100**	**100**

Analysis:

From above table no. 5, it is clear that out of total 100 respondents from Delhi-NCR, 65 respondents agreed that online learning improves student engagement while 28 respondents were strongly agreed with it.

On the other hand, 4 and 2 respondents were 'Disagree' and 'Strongly Disagree' respectively about the online learning improves student engagement. While 1 respondent was neutral about this feedback.

Interpretation-

According to which, the percentage of respondents who agree that online learning improves student engagement is 65 percent and those who strongly agree with this statement are sharing the percentage of 28.

Table 6

Analysis of Respondents on the basis of online learning on academic performance

S. No.	Do you think that online learning improves academic performance ?	No.	Percentage

1.	Agree	41	41
2.	Strongly Agree	26	26
3.	Disagree	19	19
5.	Strongly Disagree	12	12
5.	Neutral	2	2
	Total	**100**	**100**

Analysis:

From above table no. 6, it is clear that out of total 100 respondents from Delhi-NCR, 41 respondents agreed that online learning improves academic performance while 26 respondents were strongly agreed with this statement.

On the other hand, 19 and 12 respondents were 'Disagree' and 'Strongly Disagree' respectively about online learning improves academic performance. While 2 respondents were neutral about this feedback.

Interpretation

According to which, the percentage of respondents who disagree that online learning improves academic performance is 41 percent and those who strongly disagree with this statement are sharing the percentage of 26.

Research outcome

The impact of online learning on academic performance is a complex issue with mixed results. Studies have shown that online learning can be as effective as traditional face-to-face instruction, particularly when the courses are well-designed and supported by qualified instructors. However, other studies have found that online learning may not be as effective for certain student populations, such as those with limited access to technology or those who require significant support.

Several factors can influence the impact of online learning on academic performance. The quality of the course materials and the expertise of the instructors are critical. A well-structured curriculum with engaging activities

and assessments can enhance student learning. Additionally, the availability of technical support and the quality of the online platform can play a significant role.

In conclusion, online learning offers both opportunities and challenges for student engagement and academic performance. While it can provide a flexible and personalized learning experience, it is essential to address the potential drawbacks, such as isolation and technical difficulties. By carefully designing online courses and providing adequate support, educators can harness the power of technology to enhance student learning and achieve positive outcomes.

Students can access course materials and participate in activities at their own pace and convenience. This autonomy can foster a sense of ownership over their education, leading to increased engagement. Additionally, online platforms often incorporate interactive elements such as forums, quizzes, and simulations, which can make learning more enjoyable and engaging. These elements can help to break down the traditional passive nature of lectures and promote active participation.

In a traditional classroom setting, it can be difficult for teachers to cater to the individual needs of every student. However, online platforms can offer tools and resources that allow students to progress at their own rate and receive targeted support. This personalized approach can help to improve student motivation and confidence, leading to better academic performance.

One concern is the potential for social isolation. While online platforms can facilitate communication and collaboration, they cannot fully replicate the face-to-face interactions that occur in a traditional classroom. This lack of social connection can negatively impact student engagement and motivation. Additionally, online learning requires self-discipline and time management skills, which may be difficult for some students. Without proper support and guidance, students may struggle to stay on track and complete their coursework.

While it offers unique advantages such as flexibility and personalization, it also presents challenges related to social isolation and self-discipline. To maximize the benefits of online learning, it is essential to provide students with adequate support and resources, and to create a learning environment that fosters engagement and motivation. By addressing these challenges and leveraging the opportunities offered by online learning, educators can help students to achieve their full potential.

Online platforms often offer interactive elements, such as discussion forums, virtual simulations, and multimedia resources, that can make learning more engaging and immersive. These interactive elements can help to capture students' attention, stimulate their curiosity, and foster a deeper understanding of the material.

Unlike traditional classrooms, which typically follow a fixed schedule, online courses allow

students to learn at their own pace and on their own terms. This flexibility can be particularly beneficial for students who have difficulty fitting traditional classroom schedules into their lives, such as working professionals or parents. Additionally, online learning can empower students to take ownership of their education, as they are able to choose the resources and strategies that work best for them.

One of the main concerns is the potential for social isolation. In traditional classrooms, students have the opportunity to interact with their peers and build relationships. Online learning, on the other hand, can sometimes feel isolating, as students may not have the same level of social interaction as they would in a physical classroom. To address this issue, online platforms should be designed to facilitate social interaction and collaboration among students.

Issues such as slow internet connections, hardware problems, and software glitches can disrupt the learning process and frustrate students. To mitigate these challenges, it is important for educational institutions to invest in reliable technology and provide adequate technical support to students.

By offering interactive elements, flexibility, and autonomy, online learning can create a more engaging and personalized learning experience. However, it is important to address the challenges of social isolation and technical difficulties to ensure that online learning is a positive and effective experience for all students. As technology continues to evolve, it is likely that online learning will play an increasingly important role in education.

Conclusion

Online learning has emerged as a powerful tool for education, offering accessibility, flexibility, and a wealth of resources. While challenges such as isolation and self-discipline must be addressed, the potential benefits of online learning are immense. As technology continues to evolve, we can anticipate a future where online education plays an even more central role in our lives. The future of online learning looks promising. Technological advancements are continually improving the online learning experience, with innovations such

as virtual reality and artificial intelligence enhancing engagement and personalization. Furthermore, as more institutions recognize the benefits of online education, we can expect to see a wider range of high-quality online courses available.

References

1. Abdullah, F., & Kauser, S. (2022). Students' perspective on online learning during pandemic in higher education. Quality & Quantity.
2. Actualidad, T. D. E. (2018). Academic Performance in Higher Education : Challenges for the Teacher and Student Commitment. Revista Científica de la UCSA, 5(3), 55–63.
3. Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. Interactive Learning Environments, 1–13.
4. Ali, L., & Dmour, N. A. H. H. A. (2021). The shift to online assessment due to covid-19: An empirical study of university students, behaviour and performance, in the region of UAE. International Journal of Information and Education Technology, 11(5), 220-228.
5. Ali, M., Puah, C. H., Fatima, S., Hashmi, A., & Ashfaq, M. (2022). Student e-learning service quality, satisfaction, commitment and behaviour towards finance courses in COVID-19 pandemic. International Journal of Educational Management, (March 2020).
6. Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2019). Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. Internet and Higher Education, 11(3–4), 133–136.
7. Bawane, J., & Spector, J. M. (2019). Prioritization of online instructor roles: implications for competency-based teacher education programs. Distance Education, 30(3), 383–397.
8. Broadbent, J. (2021). Comparing online and blended learner's self-regulated learning strategies and academic performance. The Internet and Higher Education, 33, 24-32.
9. Chet, C., Sok, S., & Sou, V. (2022). The Antecedents and Consequences of Study Commitment to Online Learning at Higher Education Institutions (HEIs) in Cambodia. Sustainability (Switzerland), 14(6).

10. Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. Journal of Educational Technology Systems, 49(1), 5-22.
11. Edmunds, R., Thorpe, M., & Conole, G. (2021). Student attitudes towards and use of ICT in course study, work and social activity: A technology acceptance model approach. British Journal of Educational Technology, 43(1), 71-84.
12. Fernandez, S. G. (2019). Academic Performance in Higher Education: Challenges for the Teacher and Student Commitment. Revista Científica de la UCSA, 5(3), 55-63.
13. Gosak, L., Fijačko, N., Chabrera, C., Cabrera, E., & Štiglic, G. (2021, August). Perception of the Online Learning Environment of Nursing Students in Slovenia: Validation of the DREEM Questionnaire. Healthcare, 9(8), 998.