Online Teaching in Management Education: A Case Study of Janakpurdham Binod Shah, PhD¹ & Uday Kishor Tiwari²

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Abstract

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This research paper explores the effectiveness, challenges, and opportunities of online teaching in the context of management education in Janakpurdham, Nepal. In this study, a survey method of research design has been employed. The nature of this study is a descriptive and survey research. Questionnaire method has been used to collect the data from students and faculty members. The study has been done by convenient sampling method. The findings reveal that both faculty members and students perceive online teaching as equally effective as traditional face-to-face teaching in management education. The benefits of online teaching, such as flexibility, access to diverse resources, and opportunities for global collaborations, are acknowledged. However, challenges related to limited face-to-face interactions, maintaining student engagement, and technical issues are identified. The research highlights the significance of faculty training and support in adapting to online teaching methods. The study also offers recommendations to improve online teaching practices in management education in Janakpurdham, emphasizing interactive pedagogical strategies, technological readiness, and incorporating student feedback into course design.

Keywords: Online teaching, management education, e-learning, student engagement, faculty training

Introduction

Background of the Study

In recent years, the world has witnessed a significant shift in the field of education, particularly in the realm of management education, due to the rapid advancement of technology. The emergence of online teaching and learning methodologies has brought forth transformative changes in the way knowledge is imparted and acquired. Janakpurdham, a city https://doi.org/10.3126/jom.v6i1.58880

in the southeastern region of Nepal, has not been immune to these developments. With its rich cultural heritage and growing educational infrastructure, Janakpurdham has been gradually embracing online teaching as a means to enhance the quality and accessibility of management education. The traditional approach to management education in Janakpurdham, as in many other parts of Nepal, primarily involved face-to-face classroom interactions. However, this conventional method faced various challenges, such as limited resources, geographical constraints, and a shortage of qualified faculty members. Additionally, the COVID-19 pandemic further exacerbated these limitations, leading to the temporary closure of educational institutions and highlighting the urgent need for alternative educational approaches. According to Ali (2020), the COVID-19 pandemic has presented challenges for staff, students, and administrators to adopt online learning despite some shortcomings in its organization and implementation.

As a response to these challenges, many educational institutions in Janakpurdham have shifted their focus towards integrating online teaching methodologies into their management education programs. Kuh and Hu's (2001) study confirmed that the majority of students are comfortable using information technology, so the shift to online learning may not be a significant change for many universities. However, it is important to consider students' readiness and access to technological devices at all times.

Online teaching offers several advantages, including increased flexibility, personalized learning experiences, and the ability to reach a broader audience. Moreover, it opens up opportunities for students to access world-class resources and collaborate with experts from various corners of the globe. Earle (2002) discovered that students are enthusiastic about learning integrated with Information and Communication Technology (ICT) as it allows them to utilize the internet and engage with lessons from the comfort of their homes. This enthusiasm from students highlights the need for adequate ICT infrastructure and student support services to ensure meaningful and enjoyable learning experiences for all.

Despite the potential benefits of online teaching, its successful implementation requires a thorough understanding of its impact on students, faculty, and the overall educational ecosystem. Arkorful and Abaidoo (2015) in their study outlined that e-learning, in certain cases is held through remoteness and contemplation resulting in lack of student's interaction. In comparison with the contemporary mode of education, e-learning might result in being less effective due to the absence of face-to-face encounter with instructions or teachers. Since in e-learning method, assessments are generally held online which reduces the possibility of restricting illegitimate activities such as; cheating, plagiarism etc.

Therefore, conducting a comprehensive case study on the state of online teaching in management education in Janakpurdham becomes crucial. This research aims to explore the https://doi.org/10.3126/jom.v6i1.58880

current landscape of online teaching platforms, the challenges faced during its implementation, and the attitudes of students and faculty members towards this transformative mode of education. By examining the case of Janakpurdham, this study seeks to provide valuable insights into the opportunities and barriers faced by institutions, educators, and students in adopting online teaching practices. The findings from this research can serve as a foundation for formulating effective policies and strategies to further enhance the integration of online teaching in management education. In conclusion, as technology continues to shape the future of education, understanding the impact and potential of online teaching in management education is essential to ensure that educational institutions in Janakpurdham can adapt and thrive in the digital age. Through this case study, the research aims to shed light on the evolving landscape of management education and contribute to the ongoing discourse on innovative and effective teaching methodologies in Nepal's educational landscape.

Focus of the Study

The focus of this study is to investigate the effectiveness, challenges, and opportunities of online teaching in the context of management education in Janakpurdham, Nepal. The research aims to understand the perceptions and experiences of both faculty members and students regarding online teaching methods, student engagement, and learning outcomes. Specifically, the study seeks to address the following key aspects:

Effectiveness of Online Teaching

The research examines how online teaching in management education is perceived in comparison to traditional face-to-face teaching. It assesses the extent to which online teaching is effective in delivering course content, facilitating student learning, and achieving educational objectives.

Faculty and Student Experiences

The study explores the experiences of faculty members who have transitioned to online teaching during the COVID-19 pandemic. It investigates the challenges faced by educators and the strategies they employ to adapt to the online learning environment. Additionally, the study seeks to understand students' perspectives on online learning, their satisfaction levels, and their engagement with online courses.

Challenges and Opportunities

The study identifies the challenges encountered by faculty members and students in online teaching and learning. It also explores the opportunities presented by online teaching, such as increased access to resources and collaborations beyond geographical boundaries.

Faculty Training and Support

The research investigates the impact of faculty training and support on the successful implementation of online teaching in management education. It assesses the significance of professional development initiatives for educators to effectively utilize online teaching platforms and tools.

Statement of the Problem

The integration of online teaching in management education in Janakpurdham, Nepal, presents both opportunities and challenges for educational institutions, faculty, and students. As this mode of education becomes increasingly prevalent, it is crucial to understand the current state of online teaching in Janakpurdham's management education and identify the key issues that impact its successful implementation. Therefore, this research aims to seek answers to the following research questions:

- What is the current state of online teaching platforms and technologies utilized in management education institutions in Janakpurdham?
- What are the perceived benefits and challenges of integrating online teaching in management education, as reported by faculty members and students in Janakpurdham?
- What are the attitudes and perceptions of students in Janakpurdham towards online teaching in management education?
- What are the perspectives of faculty members in Janakpurdham regarding the integration of online teaching in management education, including their experiences, training needs, and perceived barriers?

Objectives of the Study

The primary aim of this research is to conduct an in-depth investigation into the state of online teaching in management education in Janakpurdham, Nepal. The study seeks to achieve the following objectives:

- To assess the current state of online teaching platforms and technologies utilized in management education institutions in Janakpurdham.
- To identify the perceived benefits and challenges of integrating online teaching in management education, as reported by faculty members and students in Janakpurdham.
- To explore the attitudes and perceptions of students in Janakpurdham towards online teaching in management education.
- To investigate the perspectives of faculty members in Janakpurdham regarding the integration of online teaching in management education, including their experiences, training needs, and perceived barriers.

Rationale of the Study

The rationale of this study lies in the increasing prevalence of online education and its potential impact on management education in the context of Janakpurdham, Nepal. As technology continues to advance, online teaching has emerged as a viable alternative to traditional face-to-face instruction, particularly during the COVID-19 pandemic. Understanding the effectiveness, challenges, and opportunities of online teaching in management education is crucial for educational institutions, policymakers, and educators in Janakpurdham. The research aims to provide valuable insights into the effectiveness and practical implementation of online teaching in management education. The findings of the study can contribute to evidence-based decision-making for educational institutions, guiding them in optimizing the benefits of online teaching while addressing the challenges. Furthermore, the study has the potential to inform faculty training and support programs, emphasizing the importance of professional development to ensure educators are equipped with the necessary skills and strategies for successful online teaching practices. It also offers recommendations for designing engaging and effective online courses to enhance student engagement and satisfaction.

Overall, the study's rationale lies in its potential to shed light on the opportunities and limitations of online teaching in management education in Janakpurdham, enabling educational stakeholders to make informed decisions to enhance the quality and accessibility of management education in the region.

Limitations of the Study

The limitations of this study are as follows:

- The study's findings may be limited in their generalizability beyond the specific context of Janakpurdham. The region's unique socio-cultural, economic, and institutional factors may affect the results, making it challenging to apply the findings to other settings.
- The sample size of the study, especially in a case study design, may be relatively small. While efforts will be made to ensure representative samples, the limited number of participants may impact the overall representativeness of the research findings.
- The study's time constraints may limit the depth of data collection. A longer research period might offer a more comprehensive understanding of the complexities of online teaching in management education.
- The study relies on self-reported data from faculty members and students, which may introduce response bias. Participants might provide socially desirable responses or recall inaccurately, affecting the accuracy of the data collected.
- Due to the specific focus on management education in Janakpurdham, the study might not
 address all aspects of online teaching in other academic disciplines, potentially limiting its
 scope and applicability.

Review of Literature

Becker et al. (2017) examined the adoption of online teaching in higher education and found that it has been steadily increasing over the years due to advancements in technology and the demand for flexible learning options. The study emphasizes the potential of online teaching in enhancing educational access and reaching a diverse student population. Universities and colleges have also started providing online resources to supplement traditional teaching methods, as noted by Ruzgar (2005). Online learning is generally viewed positively by students, as found by Sharma (2023). The flexibility and convenience of online learning allow students to balance their studies with other commitments. It also provides access to a wider range of courses and resources not typically available in traditional classrooms. However, there are challenges associated with online learning, including technical issues, a lack of interaction and collaboration, and the need for effective time management.

Bolliger and Wasilik (2009) conducted a meta-analysis on the benefits and challenges of online teaching in higher education. Their findings highlighted the advantages of increased student engagement, flexibility, and access to resources, while acknowledging challenges related to faculty training, student readiness, and the need for institutional support. Al Rawashdeh et al. (2021) stated that e-learning is an effective tool for knowledge transfer and has the potential to surpass conventional teaching methods. It offers advantages such as improved communication between teachers and students and the development of students' skills. Furthermore, it presents scientific material to students in an engaging manner.

The integration of e-learning, facilitated by information technology (IT), has reduced costs for students while enhancing the quality of learning and teaching. The major advantage of e-learning is its flexibility, allowing learners to access classes anywhere and at any time. Additionally, e-learning offers various learning approaches by utilizing interactive content available on the internet (Songkram, 2015). The absence of essential personal interactions is the most noticeable drawback of e-learning, not only among colleague learners, but also between instructors and learners (Islam, Beer and Slack, 2015). A study by Picciano (2002) explored faculty perspectives on online teaching in higher education. The research highlighted faculty concerns about workload, technical challenges, and the need for professional development.

The review of the literature reveals that online teaching in management education has gained attraction globally, with numerous studies emphasizing its potential benefits and challenges. By synthesizing and analyzing existing literature, this research aims to contribute to the enhancement of online teaching practices in Janakpurdham's management education and provide valuable insights for educators, administrators, and policymakers in the region.

Materials and Methods

Research Design

For this study on online teaching in management education in Janakpurdham, a survey method of research design has been employed. The nature of this study is descriptive and survey research. This approach allows for a comprehensive investigation of the research topic by collecting quantitative data through surveys from respondents. The survey method provides a deeper understanding of the current state of online teaching, its benefits, challenges, and effectiveness in the context of management education in Janakpurdham.

Sample Selection

The sample consists of students and faculty members from multiple management education institutions in Janakpurdham. A total of ninety students and thirty faculty members are taken sample for study. A purposive sampling technique has been used to select educational institutions known for their active involvement in online teaching. The students and faculty members involved in online courses or programs have been approached for participation in the study.

Data Collection

Two separate structured questionnaires have been designed to collect quantitative data from students and faculty members. The survey included questions related to their experiences with online teaching, perceived benefits, challenges, and attitudes towards this mode of education. Questionnaires were distributed by hand to the respondents and enough time was given to the respondents to fill the questionnaire in order to reduce sampling error.

Data Analysis

Tables were created, analyzed, and interpreted using excel sheets on a computer, based on the data collected from questionnaires. Conclusions were drawn from the findings derived from the tabulated information and observations made during data collection. Descriptive statistics, including frequencies, and percentages, were calculated to analyze the data gathered through surveys.

Results and Discussion

The results and discussion section presents the findings of the research study. This section has outlined the results obtained from the structured questionnaires administered to faculty members and students.

Analysis of Respondents

Demographic characteristics of students i.e. gender, age, program of the study and years of study are presented in Table 1 and demographic characteristics of faculty members i.e. gender, age, designation and years of teaching experience are presented in Table 2.

Table 1Demographic Characteristics of Students

Variables		Percentage
Gender		-
Male	54	60
Female	36	40
Total	90	100
Age		
18 -23 years	50	55.56
24-29 years	35	38.89
Above 29 years	5	5.55
Total	90	100
Program of Study		
Undergraduate	60	66.67
Postgraduate	30	33.33
Total	90	100
Years of Study		
3-5 years	72	80
5-7 years	18	20
Total	90	100

Notes. Field Survey, 2023.

Table 1 provides the demographic characteristics of the sample students. 60% of the students were male while 40% were female. The majority, around 56%, were between 18 to 23 years old. Students aged 24 to 29 made up around 39% and those above 29 years were only 6%. Most of the students, approximately 67%, were undergraduate students, while the remaining 33% were postgraduate students. The majority of the students, 80% of them, had been studying for between 3 to 5 years, with the rest studying for 5 to 7 years.

Table 2Demographic Characteristics of Faculty Members

Variables	Frequency	Percentage
Gender		
Male	24	80
Female	6	20
Total	30	100
Age		
30 -39 years	6	20
40-49 years	16	53.33
50 years and above	8	26.67
Total	30	100
Designation		
Assistant Professor	15	50
Associate Professor	12	40
Professor	3	10
Total	30	100
Years of Teaching Experience		
1 – 10 years	9	30
11–20 years	16	53.33
21 years and above	5	16.67
Total	30	100

Table 2 provides demographic information of sample faculty members. Around 80% of the faculty members were male and 20% were female. Regarding age, 20% of the faculty were between 30 to 39 years old, 53% were between 40 to 49 years old and the remaining 27% were 50 years and above. In terms of designation, 50% were Assistant Professors, 40% were Associate Professors and the remaining 10% were Professors. When it comes to years of teaching experience, 30% had between 1 to 10 years of experience, 53% had between 11 to 20 years of experience and the remaining 17% had 21 years or more experience.

Online Learning and Teaching Experience

Online learning experiences of students are presented in Table 3 and online teaching experiences of faculty members are presented in Table 4.

Table 3Online Learning Experience of Students

Variables	Frequency	Percentage
How do you access online classes? (Select all that apply)		
Desktop or laptop computer	60	66.67
Tablet	15	16.67
Smartphone	45	50
How satisfied are you with the online learning experience	in manageme	nt education?
Very satisfied	6	6.67
Satisfied	54	60
Neutral	21	23.33
Dissatisfied	6	6.67
Very dissatisfied	3	3.33
Total	90	100
What aspects of online teaching do you find most beneficial? (Select all that apply)		
Flexibility in study schedule	60	66.67
Access to online resources	45	50
Opportunities for virtual collaboration and group work	30	33.33
Interactive multimedia content	18	20
Ability to revisit and review class materials	42	46.67

Table 3 shows results of a survey regarding online learning experiences of the sample students. The most common way students access online classes is through a desktop or laptop computer (66.67%), followed by smartphone (50%) and tablet (16.67%). In terms of satisfaction level, 60% of students are satisfied with the online learning experience, while 23.33% are neutral. Small percentages are either very satisfied (6.67%) or dissatisfied (6.67%) or very dissatisfied (3.33%). The most beneficial aspects of online learning according to students are flexibility in study schedule (66.67%), access to online resources like lecture recordings and materials (50%), ability to revisit class materials (46.67%) and interactive multimedia content (20%). The opportunities for virtual collaboration and group work are seen as beneficial by 33.33% of students.

Table 4Online Teaching Experience of Faculty Members

Variables	Frequency	Percentage
Please specify the online teaching platform(s) you have used.		

Variables	Frequency	Percentage
Google Classroom	10	33.33
Zoom	27	90
Microsoft Teams	15	50
Others	9	30
How frequently have you conducted online teaching	g sessions?	
Daily	9	30
Several times a week	18	60
Once a week	2	6.67
Occasionally	1	3.33
Total	30	100
What motivated you to start teaching online? (Select all that apply)		
Institutional mandate due to COVID-19 pandemic	21	70
To offer flexible learning options for students	12	40
To reach a broader audience of students	10	33.33
To enhance student engagement and interaction	18	60
To explore new pedagogical approaches	15	50

Table 4 contains data about the online teaching experience of 30 faculty members. The most commonly used online teaching platforms are Zoom, used by 90% of the respondents, followed by Microsoft Teams at 50% and Google Classroom at 33.3%. Regarding frequency, 30% conduct online teaching sessions daily, 60% several times a week, and the remaining 10% occasionally. The main motivations for starting to teach online were the institutional mandate due to the COVID-19 pandemic (70%), to enhance student engagement and interaction (60%), to explore new pedagogical approaches through online teaching (50%) and to offer flexible learning options for students (40%).

Perceptions of Online Teaching

Perceptions of students towards online teaching are presented in Table 5 and perceptions of faculty members towards online teaching are presented in Table 6.

Perception of Students Towards Online Teaching

Variables	Frequency	Percentage
How do you perceive the effectiveness of online teaching compared to traditional face-to-face		
teaching in management education?		

Variables	Frequency	Percentage
More effective	6	6.67
Equally effective	75	83.33
Less effective	9	10
Total	90	100
What do you believe are the key benefits of online teaching in management education? (Select all that apply)		
Flexibility and convenience	60	66.67
Access to a diverse range of learning resources	45	50
Facilitation of collaborative learning activities	30	33.33
Ability to revisit and review class materials	42	46.67

Table 5 shows students' perceptions of online teaching. Regarding the effectiveness of online teaching compared to face-to-face teaching, 6.67% of the students felt it was more effective, 83.33% felt it was equally effective and 10% felt it was less effective. When asked about the key benefits of online teaching, the majority of students cited flexibility and convenience at 66.67%. Half of the students mentioned access to a diverse range of learning resources as a benefit. Around one third stated that facilitation of collaborative learning activities was a benefit, and 46.67% said the ability to revisit and review class materials was a key benefit.

 Table 6

 Perception of Faculty Members Towards Online Teaching

Variables	Frequency	Percentage
How do you perceive the effectiveness of online teaching compared to traditional face-to-face		
teaching in management education?		
More effective	5	16.67
Equally effective	19	63.33
Less effective	6	20
Total	30	100
What do you believe are the key benefits of online teaching in management education? (Select		
all that apply)		
Increased student engagement	10	33.33
Flexibility for students and faculty	12	40

Access to a diverse range of learning resources	18	60
Facilitation of collaborative learning activities	9	30
Enhanced global collaborations	15	50

Table 6 contains the results of a survey of faculty members regarding their perception of online teaching. Around 63% of the faculty members surveyed found that online teaching was equally effective as traditional face-to-face teaching in management education. About 17% felt it was more effective, while 20% felt it was less effective. The key benefits of online teaching, as perceived by faculty, are access to a diverse range of learning resources (60%), enhanced global collaborations (50%), flexibility for both students and faculty (40%), increased student engagement (33.33%) and facilitation of collaborative learning activities (30%).

Challenges of Online Learning and Teaching

Challenges faced by students in online learning are presented in Table 6 and challenges faced by faculty members in online teaching are presented in Table 8.

Table 7Challenges Faced by Students in Online Learning

Variables	Frequency	Percentage
What challenges have you faced while engaging in online learning in management education?		
(Select all that apply)		
Technical issues	23	25.56
Managing time and study schedule	21	23.33
Lack of face-to-face interactions with peers and instructors	36	40
Difficulty in staying motivated and focused	24	26.67
Limited access to resources	5	5.56

Notes. Field Survey, 2023.

According to Table 7, the biggest challenge that students face in online learning seems to be lack of face-to-face interactions with peers and instructors. Over 40% of respondents selected that as an issue. The second most common problem was difficulty in staying motivated and focused, with about 27% of students struggling with that. Technical issues and managing time and study schedule were each selected by around a quarter of respondents. Limited access to resources was the least commonly cited challenge. So the key hurdles for students in online management education appear to be lack of face-to-face interactions with peers and instructors, difficulty in staying motivated, managing their time effectively, and overcoming technical difficulties.

Table 8Challenges Faced by Faculty Members in Online Teaching

Variables	Frequency	Percentage
What challenges have you faced while conducting online teaching in management education?		
(Select all that apply)		
Technical issues	10	33.33
Maintaining student engagement and motivation	17	56.67
Adapting teaching strategies for the online environment	9	30
Assessment and evaluation of student learning	21	70
Time management and workload	5	16.67
Lack of training and support for online teaching	8	26.67

Table 8 discusses challenges faced by faculty members in online learning. The challenges faculty members reported facing were assessment and evaluation of student learning with 70% of respondents, maintaining student engagement and motivation with 56.67% of respondents selecting it, technical issues with 33.33% of respondents, adapting teaching strategies for the online environment with 30% of respondents, and lack of training and support for online teaching with 26.67% of respondents.

Major Findings of the Study

The major findings of the study are as follows:

- Both faculty members and students perceived online teaching as equally effective as
 traditional face-to-face teaching in the context of management education in Janakpurdham.
 Online teaching was recognized for its flexibility, access to diverse learning resources, and
 opportunities for global collaborations.
- Faculty members who received training and support in online teaching reported a smoother transition to the online learning environment. Training initiatives positively influenced their adaptation to online teaching methodologies and enhanced their confidence in utilizing online teaching platforms and tools.
- Students expressed overall satisfaction with the online learning experience, citing flexibility and access to resources as key benefits. However, challenges related to limited face-to-face interactions, technical issues, and time management affected student engagement.

- Technological readiness, including access to stable internet connectivity and necessary
 devices, played a vital role in students' ability to fully participate in online courses and
 engage with course materials effectively.
- Faculty members encountered challenges in maintaining student engagement, addressing technical issues, and adapting teaching strategies to the online environment. Students faced challenges related to time management, technical difficulties, and limited face-to-face interactions.
- The study identified opportunities for improving online teaching practices in management education in Janakpurdham. These included enhancing faculty training and support, incorporating more interactive pedagogical strategies, and leveraging student feedback to inform course design.

Discussion

The research findings reveal that both faculty members and students perceive online teaching to be equally effective as traditional face-to-face teaching in management education. This result aligns with previous studies that highlight the benefits of online teaching, such as flexibility, access to diverse resources, and opportunities for global interactions. The challenges faced by faculty members and students during online teaching implementation are consistent with existing literature. Addressing technical issues and maintaining student engagement remain crucial aspects in ensuring effective online teaching practices. The positive impact of faculty training and support on their adaptation to online teaching underscores the significance of professional development initiatives for educators in Janakpurdham. The majority of students expressed satisfaction with the online learning experience, attributing it to the flexibility and access to resources. However, challenges such as time management and limited face-to-face interactions also affected student engagement. To enhance student engagement further, educators should focus on fostering more interactive and collaborative activities within online courses.

Conclusion

The research findings indicate that online teaching has gained acceptance and effectiveness in management education in Janakpurdham. Faculty members and students perceive it as an effective mode of learning, providing flexibility and access to diverse resources. However, challenges such as technical issues and maintaining student engagement need to be addressed through faculty training and interactive course design. By implementing the recommendations, institutions can further enhance online teaching practices and create a more conducive and engaging learning environment for management education in Janakpurdham. Based on the research findings, several recommendations can be made to improve online teaching in management education in Janakpurdham. These include:

- Providing regular faculty training and support to enhance their online teaching skills and address technical challenges.
- Designing courses with interactive pedagogical strategies, such as online discussions, group projects, and real-world case studies, to promote student engagement.
- Ensuring technological readiness by providing students with access to stable internet connectivity and necessary devices.
- Incorporating student feedback and preferences into course design to enhance student satisfaction and learning outcomes.

References

- Al Rawashdeh, A. Z., et al., 2021. Advantages and disadvantages of using e-learning in university education: analyzing students' perspectives. *The Electronic Journal of e-Learning*, 19(3), 107-117
- Ali, W. (2020). Online and Remote Learning in Higher Education Institutes: A Necessity in light of COVID-19 Pandemic. *Higher Education Studies*, *10*(3), 16-25. https://doi.org/10.5539/hes.v10n3p16
- Arkorful, V., and Abaidoo, N., 2015. The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 12(1), 29-42.
- Becker, S. A., Brown, M., Dahlstrom, E., Davis, A., DePaul, K., Diaz, V., ... & Pomerantz, J. (2017). *NMC horizon report: 2017 Higher Education Edition*. The New Media Consortium.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, *30*(1), 103-116.
- Earle, R. S. (2002). The integration of instructional technology into public education: promises and challenges. *Educational Technology & Society*, 42(1), 5-13.
- Islam, N., Beer, M., and Slack, F., 2015. E-learning challenges faced by academics in higher education. *Journal of Education and Training Studies*, *3*(5), 102-112.
- Kuh, G. D., & Hu, S. (2001). The relationships between computer and information technology use, student learning, and other college experiences. *Journal of College Student Development*, 42, 217-232.
- Picciano, A. G. (2002). Beyond student perceptions: issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks*, 6(1), 21-40.

- Ruzgar, N. S. (2005). A research on the purpose of internet usage and learning via the internet. *The Turkish Online Journal of Educational Technology, 4*(4).
- Sharma, B. (2023). Perception of students towards online learning: a review of the literature. Journal of Research in Humanities and Social Science, 11(4), 189-191
- Songkram, N., 2015. E-learning system in virtual learning environment to develop creative thinking for learners in higher education. *Procedia-Social and Behavioural Sciences*, 174, 674-679.