

Prevalence of Online Learning: Adoption and Impact of Virtual Learning among Management Graduates in Nepalese Higher Education

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Abstract

This study investigates the prevalence and impact of online learning in Nepalese higher education institutions, focusing on the experiences of students and faculty from various perspectives, including student, faculty, technological, and overall effectiveness. Using a purposive sampling approach, respondents were selected to gain deeper insights into the realities of online learning. The research was conducted across four universities with more than ten years of experience and active management programs. The findings reveal that the rise of online education has significantly shifted the perceptions of both faculty and students regarding the platform's efficacy. However, it was also discovered that Nepalese students find online instruction to be less engaging and connected compared to traditional methods. The study highlights the positive aspect of the pandemic in opening doors to alternative educational methods, suggesting that this could be the beginning of a significant shift in educational practices. The effectiveness of online classes requires thoughtful design and preparation by all stakeholders involved in the education system. In these uncertain times, it is crucial to understand the strategies and plans of management institutions concerning online education. The insights provided by this study are valuable for stakeholders in formulating future strategies for online learning.

Keywords: Universities, Higher Education, Online Learning, Learning Strategies, Nepal

Introduction

The landscape of higher education has undergone a significant transformation with the rise of flexible learning platforms, providing institutions a competitive edge in catering to diverse student needs (Becker, 1993; Salama & Hinton, 2023). The integration of online learning into higher education systems has been especially notable over the past decade (Allen & Seaman, 2016). This shift has been driven by the evolving needs of learners and advancements in digital technologies, which have expanded the boundaries of traditional educational methods (Rana et al., 2020). The outbreak of the COVID-19 pandemic accelerated the adoption of virtual learning environments, compelling higher education institutions across the globe to switch to digital platforms as a necessity rather than an option (Chaudhary et al., 2023; Jose et al., 2022). Platforms such as Coursera, EDX, Udemy, LinkedIn Learning, and Udacity experienced exponential growth as institutions transitioned from physical classrooms to online spaces. The pandemic not only highlighted the importance of online learning but also raised questions about the sustainability of such platforms in less digitally developed regions, particularly in low-income countries like Nepal, where digital infrastructure and resources are limited.

Despite the global expansion of online learning, the situation in resource-constrained countries like Nepal presents unique challenges. The swift adoption of online learning in Nepal during the pandemic occurred in the absence of substantial strategic planning or infrastructural preparedness (Pokharel, 2020; Pandit, 2020). The National ICT policy, which could have facilitated a smoother transition to virtual learning, did not make a significant impact, leaving many academic institutions struggling to cope with the new demands of online education (Chaudhary et al., 2023; Richard & Haya 2009). This presents a critical gap in understanding how low-income countries can effectively integrate digital learning into their educational systems while overcoming infrastructural and financial constraints. Online education is not merely about substituting physical classrooms with virtual ones. It requires a comprehensive transformation of pedagogical practices, including the adoption of new teaching methodologies, the incorporation of interactive tools, and the reconfiguration of faculty-student interactions (Tanner et al., 2009; Salama & Hinton, 2023). Additionally, the management of this transition has created leadership roles dedicated to overseeing and improving the quality of virtual education (Fredericksen, 2017). Despite the rapid adoption, online learning is not without its challenges. Issues such as reduced peer interaction, lack of student motivation, and lower levels of student engagement compared to traditional classroom settings have been reported (Bowen et al., 2014; Rovai et al., 2005).

This study focuses on exploring the prevalence and impact of online learning among management graduates in Nepalese higher education institutions during and after the COVID-19 pandemic. The research aims to examine the challenges and opportunities presented by the shift to virtual learning, especially in a resource-constrained environment. The study also seeks to address the long-term viability of online education in Nepal, where digital infrastructure remains underdeveloped, and academic institutions continue to face budgetary constraints. The objective is to provide a clear understanding of how online

learning can be optimized and sustained in the future, even in the face of such constraints. This research draws on the theory of digital transformation in education, which emphasizes the critical role of Information and Communication Technology (ICT) in modernizing learning environments (Yang & Arjomand, 1999). The expansion of ICT has revolutionized traditional teaching methods by integrating digital tools and platforms that allow for flexible and personalized learning experiences (Wang et al., 2007). Digital platforms offer an alternative to conventional face-to-face learning, enabling students to access educational resources remotely, thereby reducing geographical barriers (Arkorful & Abaidoo, 2014). This is especially relevant in Nepal, where geographical and infrastructural challenges often limit access to quality education.

The adoption of virtual learning platforms also aligns with constructivist learning theories, which emphasize the active role of learners in constructing knowledge through interaction with digital content, instructors, and peers (Dabbagh & Kitsantas, 2012). Furthermore, social learning theory, which underscores the importance of peer interactions and collaborative learning, is relevant in understanding the limitations of online learning. Scholars such as Rovai, Wighting, and Liu (2005) have argued that reduced social exposure in online environments may lead to lower levels of learning satisfaction and a diminished sense of belonging, critical elements for student success.

Despite the global focus on online education, there is a noticeable lack of research examining its impact on higher education in Nepal, particularly among management graduates. While studies from developed countries have documented the effectiveness of online learning platforms, little is known about the adoption and success of these platforms in countries with limited digital resources, such as Nepal (Mukhametgaliyeva et al., 2022). The pandemic created an unprecedented opportunity for Nepalese academic institutions to experiment with online learning, yet the absence of strategic planning and infrastructural support has raised concerns about its long-term feasibility (Pandit, 2020). This research aims to fill the gap by focusing on the prevalence of online learning among management graduates in Nepalese higher education institutions. By examining the experiences of both students and faculty, the study seeks to identify the key challenges and opportunities in the adoption of virtual learning. Furthermore, the study intends to explore how Nepalese institutions can better prepare for future educational disruptions by enhancing their digital infrastructure and pedagogical strategies.

Despite the favorable conditions created by the pandemic for Nepalese academia to excel in online learning, the National ICT policy did not make a significant impact. This indicates that there is room for improvement in policies and strategies to upgrade the quality of education in Nepal. The initiation of online learning platforms in the Nepalese academic sector has been generally accepted, but there have been many challenges, primarily due to limited resources and a lack of strategic planning for an immediate pedagogical switch (Pandit, 2020). As a result, the future of the Nepalese academic system remains uncertain. The inability to enroll new students has worsened the income levels of many private academic institutions, leading to salary cuts and layoffs of academic staff. This paper

intends to explore the feasibility of effective virtual teaching and learning in Nepal by examining the prevalence of online learning practices during and after the COVID-19 pandemic in Nepalese higher education institutions. The study aims to open gateways for formulating future strategies and survival plans in similar situations. The paper is divided into six sections: Introduction, Methodology (including research issue and context, respondent profile, survey items, and methods), Results and Analysis, Discussion and Conclusions, and finally, Implications and Limitations.

Methodology

This part of the study is mainly divided into three sections: a. Research Issues and Context, b. Respondent Profile and Survey Items, and c. Methods.

a. Research Issues and Context

The efficiency of online education is still debatable as a lot depends on the context in which it is practiced and delivered. Therefore, it is critical to understand the contextual reality. Nearly all Nepalese universities and their affiliated colleges are in a serious quandary over their future to maintain effectiveness in this changing environment. Stakeholders in Nepal are now faced with a difficult task because the issue still warrants urgent and effective policy action. Due to Nepal's status as a least developed nation, a number of problems and difficulties arise when face-to-face learning is replaced with online learning. It is mainly due to inadequate resources, outdated technologies, inadequate resources, and bad infrastructure. However, there are not many studies on the topic of how the pandemic is currently affecting higher education, particularly management education in Nepal. This shows that more thorough research is needed to analyze the problem and develop future coping mechanisms. Meanwhile, there are few queries which need to be addressed while considering the effectiveness of online classes in regards to students' perspectives, faculties' perspectives and technological perspectives. Some of the queries could be:

1. Does the institution have adequate technical assistance required to operate online classes in a full-fledged manner?
2. Are the faculty members well equipped with the technical knowledge regarding the online classes?
3. Do the faculty members have adequate materials to make the online classes effective?
4. Are the respondents satisfied with online education?

These are some basic issues which are lie in the Nepalese context. It is because of its diversity. In Nepal, there are eleven (11) universities and six (6) autonomous medical institutes, 147 constitutes campuses, 538 community base and 747 private colleges, a total 1432 colleges are offering higher education program in Management, humanities, science, education and such (UGC, 2020). A total of eleven (11) universities are Tribhuvan University (TU, 1959), Nepal Sanskrit University (NSU, 1986), Kathmandu University (KU, 1991), Pokhara University (Poku, 1995), Purbanchal University (PU, 1997), Lumbini Buddha University (LBU, 2005), Agriculture and Forestry University (AFU, 2010), Mid-

Western University (MWU, 2010), Far Western University (FWU, 2010), National Open University (NOU, 2016) and Rajarshi Janak University (RJU, 2017). These universities are offering numbers of general and specialized program depending upon the nature of universities and programs they do have, and these academic programs are run by the universities of Nepal based on the courses like annual and semester basis in bachelors, masters, M.Phil and Ph.D level. Most notably, Tribhuvan University is one of the pioneer, oldest and largest university in Nepal in terms of students, Programs, faculties, staff, campuses and the likes. In this perspectives, TU has highest percentage of student's enrollment i.e. 79.04 % followed by Pokhara University 6.94%, PU 6.16% and KU have the 4.3 percent student's enrolments. (UGC, 2020). Moreover, the enrollments percent of students in management program are seen highest than remaining other program. For example, 46.78 percent were enrolled in management stream, 17.88 percent in education, 13.20 percent in humanities and there are 7.11 percent, 6.8 percent and 6.55 percent of students are enrolled in Science and Technology, Medicine, and Engineering respectively. Thus, the relevance and need for further research on prevalence of online education in management stream during pre and post COVID-19 for future coping strategies have been markedly increased in the context of on university educational setting under the changing context.

b. Respondent Profile and Survey Items

The study utilized an exploratory approach to examine the experiences of Nepalese management students with online learning. A purposive sampling technique was employed to select respondents. Each factor was assessed using a 5-point Likert scale, where 1 indicated "strongly agree" and 5 indicated "strongly disagree," to determine the dimensions of online learning experiences as perceived by the respondents. Data was collected via Google Forms from 800 management graduates from various Nepalese universities (Tribhuvan University, Pokhara University, Purbanchal University, and Kathmandu University). These universities were selected based on their long-standing history of over a decade and their management programs. Contact details of potential respondents were obtained from the administrative offices of affiliated colleges. Upon request, the universities provided contact information for 800 students, who were then surveyed. After processing the questionnaire responses, 580 were found to be usable for further analysis. The questionnaire, which focused on the online class experiences of Nepalese management students, was based on studies by Arkorful and Abaidoo (2014), Yang and Li (2018), Abed (2019), Filius et al. (2019), and Rana et al. (2020), and covered perspectives from students, faculty, technology, and overall effectiveness.

Therefore, the table 1 provides the total number of respondents and the respondents of this study are selected from four universities such as Tribhuvan University, Kathmandu University, Pokhara University and Purbanchal University based on their more than decade of operating experience. In this study, participants were undergraduate and graduate students who are currently studies in management education.

Table 1:
Responses from Nepalese Universities

Universities	Participant s	Graduate/Undergraduate	Total
Tribhuvan University (TU)	Male	39/67	175
	Female	25/44	
Kathmandu University (KU)	Male	15/24	80
	Female	12/29	
Pokhara University (PokU)	Male	65/40	185
	Female	52/28	
Purbanchal University (PU)	Male	34/46	140
	Female	23/37	

Survey, 2022

a. Methods

To understand the effectiveness of online education, Cronbach’s Alpha of all items Students’ perspectives, Faculties’ perspectives, Technological perspectives and effectiveness of online class was used for reliability test. Therefore, the table 2 displays the reliability statistics which shows that the Cronbach’s Alpha of all variables is greater than 0.70 (Nunally, 1978)). It can be seen that there is reliability on each item used in the variables.

Table 2:
Cronbach’s Alpha

Construct	Alpha Value	No of items
Students’ Perspectives	0.729	6
Faculties’ Perspectives	0.829	5
Technological Perspectives	0.716	4
Effectiveness	0.830	4

Based on the preceding literature and premise, this particular study investigates the prevalence of online learning and its effectiveness based on the learning experience of the respondents, the study has been used descriptive statistics to describe the learning experiences of the respondents. Moreover, the correlation shall be also used to explain the relationship between independent and dependent variables. Similarly, to know the learning experiences of respondents, the student’s perspectives, Faculty perspectives and Technological perspectives factors was considering as the independent variables and learner’s satisfactions which is consider as it effectiveness, i.e. online learning Effectiveness as a dependent variable were considering on studies. In this study, to explore the effects of individual predictors on dependent variable i.e. effectiveness, the study used the model developed by (Wang, 2017). And few more variables added in the model as suggested by (Huang, et al., 2020; Yang and li., (2018).

Effectiveness of Online Learning = Functions of Students perspectives, Faculties Perspectives and Technological Perspectives)

Effect. = F (LP)

The extension of the above function is like this:

$$Effect_i = \beta_0 + \delta_{1*}OLP_i + \varepsilon_i$$

Where, Effect_s is Effectiveness OLP_i Online Learning Platform, and ε_i represents error term. Since, there are Three Online Learning Perspectives therefore taking one Perspective at a time we get,

$$Effect_i = \beta_0 + \delta_{1*}SP + \delta_{1*}FP + \delta_{1*}TP \dots + \varepsilon_i$$

$$Effect_i = \beta_0 + \delta_{1*}SP + \delta_{1*}FP + \delta_{1*}TP \dots + \varepsilon_i \dots \dots \dots (i)$$

Where, Effect_s is Effectiveness, Sp_i Student Perspective, FP Faculties Perspective and TP is Technological Perspectives, and ε_i represents error term. Furthermore, in this model analysis, Durbin Watson (D.W) test and VIF test were also used. Similarly, Multi-collainarity analysis has been also analyzed to examined the variance influencing factor (VIF) based on the studies of (Gujrati and Sangita, 2010; Jiang et al., 2013).

Results

Table 3

Descriptive Analysis

S.N.	Statements	Mean	Std. Deviation
Panel A: Students' Perspectives			
1	Online learning offers greater flexibility in class settings compared to traditional physical learning environments.	4.34	0.81
2	Online learning facilitates improved interactions and communication compared to traditional physical learning.	2.35	1.12
3	Numerical topics are more challenging to study in an online learning environment compared to traditional physical classrooms.	4.22	0.83
4	Accessibility to study materials is easier in online learning compared to physical learning.	3.75	0.72
5	Online learning facilitates the exploration of new knowledge more effectively than traditional physical study.	4.28	0.77
6	Methods of online study are more multifaceted and sophisticated compared to traditional physical study methods.	3.74	1.25
Panel B: Faculties' Perspectives			
7	The culture of peer learning is less prevalent in online learning compared to physical learning environments.	4.32	0.89

8	A lack of an organized classroom atmosphere is often observed in online classes.	4.46	0.71
9	It is complex to conduct examinations in online platform than physical classes.	4.10	0.83
10	Self-discipline is a more crucial component of online learning compared to traditional physical classes.	4.41	0.65
11	Providing and submitting assessments is more convenient and accessible in online learning compared to physical learning.	4.61	0.65
Panel C: Technological Perspectives			
12	ICT used throughout online learning enhances the quality of understanding.	4.58	0.69
13	Electricity Supply and Strong Internet Connection is essential component of online learning than physical classes	4.72	0.75
14	Latest Technological Knowledge for Students and Faculties is essential component of online learning.	3.90	0.62
15	Reading materials are easily accessible in online platform	3.70	1.09
Panel D: Effectiveness of Online Learning			
16	Interaction and discussion are effective in Online classes.	2.50	1.97
17	Faculty supportiveness and responsiveness is higher in online learning platform.	4.05	1.20
18	During the online learning internet connection and electricity supply are good enough	2.70	1.70
19	During the online learning, I found the effective course management and coordination.	3.90	1.05

N= 580

Source: Authors' compilation from survey Data

Table 3 provides a descriptive analysis of survey data collected from 580 management students across various universities and colleges in Nepal, focusing on various aspects of online and traditional face-to-face classes. The data indicates that a majority of respondents perceive online learning as offering greater flexibility in scheduling ($M=4.34$ out of 5), allowing students to attend classes at more convenient times and locations. However, there is a noticeable disagreement ($M=2.35$) concerning the level of interactivity in online classes compared to face-to-face interactions. The standard deviation ($SD=1.12$) suggests a range of opinions, with some students finding online learning interactive while others prefer the engagement of physical classes.

The majority of students find numerical subjects to be more challenging in online formats (M=4.22) due to their quantitative nature. Respondents also agree (M=4.58) that the integration of ICT in online classes enhances the learning experience relative to physical classes. Furthermore, many students believe (M=4.28) that online learning facilitates the acquisition of new knowledge, particularly in computer and information technologies. On average, students consider online learning methods to be more complex and sophisticated than physical learning methods (M=3.74), though opinions vary (SD=1.25). Tech-savvy students may find these methods less complex, while those less familiar with technology encounter more difficulties. The table also reveals that most students believe peer learning is less prevalent in online classes (M=4.32) and that online classes generally lack the organized classroom atmosphere found in physical classes (M=4.46). Additionally, students find the process of conducting examinations more complex in online platforms (M=4.10). Furthermore, a majority of respondents believe self-discipline is crucial for online learning (M=4.41) to ensure a productive learning environment. Lastly, students find that accessing study materials is easier in online learning compared to physical learning (M=3.75). Overall, the findings highlight the benefits and challenges faced by Nepalese management students in online learning compared to traditional face-to-face classes.

Table 4

Correlation Matrix

Variables	Students Perspectives	Faculties Perspectives	Technological Perspectives	Effectiveness
Students' Perspectives	1			
Faculties' Perspectives	0.63*** (0.00)	1		
Technological Perspectives	0.34** (0.03)	0.43 (0.16)	1	
Effectiveness of online learning	0.69*** (0.00)	0.38*** (0.00)	0.36 (0.061)	1

*** Significant at 1%, ** Significance at 5 %

The table reveals the correlation matrix between Students' Perspectives, Faculties' Perspectives, Technological Perspectives and Effectiveness of the online class during the COVID-19 pandemic on the basis of 580 respondents in Nepalese higher education context. The table stated that, student perspective of online learning is positive correlated with the all factors i.e. 0.63 and P-value is significant at 1 percent level of significance. Due to the timely response, convinced in use clearly stated instructions ease of information sharing and instruction knowledge online platform plays effective role in student's satisfactions (Huang et al., 2020). Faculties' perspective has negative relationship with the Technological perspectives. Due to the early adaptation of technological and lack of familiarity with ICT and technological platform, low student response rate some faculties dissatisfied with the online classes (Demuyakor, 2020; Bao, 2020). The table technological perspective has a negative relationship with the Faculties' perspectives and online class effectiveness. Chang et al, (2021) reveals that as the pandemic outbreak was sudden, the faculties as well as

educational institutions, to implement the effective learning system facing the initially challenge like choosing the best online teaching methods, insufficient preparations time for faculties and lack of expertise in ICT.

Table 05*Regression Analysis*

Model	B	T-Value	P-Value
(Constant)	1.277	3.802	0.000
Students' Perspectives	0.456	3.898	0.000
Faculties' Perspectives	0.293	3.241	0.000
Technological Perspectives	0.166	1.943	0.021
R-Squared	0.626		
Adjusted R-Square	0.605		
Durbin-Watson Statistics	2.056		
F	39.90		
P- Value	1		
	0.000		

Significance at 5 %

The table 5 summarizes the model performance with relevant analysis. The value of R-square is 0.626 and value of adjusted R-square is 0.605 which indicates that 62.6 percent of the variation has explained by the three dimension i.e. student perspective, Faculties perspectives and technological dimensions. For the test of autocorrelation, Durbin-Watson value is very close to 2 i.e. 2.056, therefore, it indicated that the independence of residual assumption is not desecrated. Therefore, there have no influence of outliers on the regression model, which indicates that there is no autocorrelation. In terms of multi-collinearity, the (VIF) variance inflation factor value is less than 10 which reveals that there is low correlation occurs amongst the variables.

To analyze the individual predictors, the t-statistics which is the regression coefficient divided by the standard error is significant for all items. Which contributes positively (P-Value 0.000) to overall effectiveness of online teaching learning practices. However, student's perspectives ($\beta = 1.456$), had the highest impact on online teaching learning effectiveness. Similarly, the Faculties Perspectives ($\beta = 0.293$) which had the partially impact and the technology perspectives ($\beta = 0.1666$) which had the least impact on online teaching learning effectiveness. The result indicates that, Nepalese universities specially management institutions are not honestly involved in academic discourse on preparedness in dealing with the effectiveness of online education. The result supported with the study of Rana et al., (2020), who reported that large number of Business school in India are missing in resilience and long term perspectives. Further, in this line, Adhikari and Shah (2021) argued that investment in higher education especially in digital infrastructure is the lowest in the SAARC (South Asian Association of Regional Cooperation) region. The result is differing with the findings of Huang et. al., (2020); Gherhes et al., (2021) which exposes that the academic institutions around the globe has been involve in set of digital

infrastructure for dealing with online education and its effectiveness for their academic environment. However, Richard and Haya (2009); Babu and Sridevi (2018), express that online teaching learning platform discard contextual limitations to provide quality education. For this, technological infrastructures and skills have required to address the interest of prospective learners. Thus, this study reveals that effectiveness of online class is determined by the physical as well as digital set up and the proper understanding about the technological knowhow. Therefore, it can be concluded that, to overcome the issues arises through the online classes need the proper understanding of different dimensions, learners need and behavior and timely attention for it. Moreover, this study has found that the management graduate experience with the online classes in terms of student's perspectives is effective for further learning. The result is contradicted the result with the study of Platt et al., (2014), They found that adequate knowledge gains from face-to-face classes however some of the researcher findings shows there is no significance difference between face-to-face and online learning platforms in terms of exposure, interactions and knowledge gained by the learners. (Hollerbach & Mims, 2007; Horspool and Yang, 2010).

The study has also discovered that students of Management experience with the online classes in terms of student perspectives has been found somehow effective for the learning. The study contradicted with the study of Chadda and Kaur (2021), which affirms that online education may have limited to reading, writing and interactions. Because social exposure and value mainly lies in the face-to-face class which explain learner satisfactions that may missing in the digital platforms. Online approach unable to create quality of teaching learning environment (Janmaimoul and Nansunanon, 2021). This means the divergence knowledge skills and abilities related to information's and communication technology (ICT) is an essential for the both student and faculties. Therefore, the study found that the effectiveness of online classes is largely determined by the technological infrastructure, Technological knowhow and learner's behavior for the effectiveness of the online education. The result of this study has also default with the study of (Hollerbach & Mims, 2007; Horspool and Yang, 2010). which opined that students are gaining more knowledge from physical classes than online and sometimes both learning approaches are alike. But Dios and charlo (2021) has supported the finding of this study, he claimed that higher level of interaction is possible in the online learning approach. As mixed viewpoint presented by the researcher of this study concludes that online learning response in Nepalese higher education was adversely affected due to weak technological infrastructure, lack of digital pedagogical approach, availability of resource and the likes.

Moreover, this study also depicts that, the experience of students towards faculty perspectives on online education seems to be partially effective. The results well supported with the study of Pandit (2020); Sharma (2020); Pokharel (2020). They confirm that must of the faculties does not like to hear sufficient knowledge, skills and resources to run online class effectively in Nepal. In this regards, Wu (2020) stated that academic institutions have need to focus on online pedagogy development rather to create only online learning environment. Thus, this study found that learners in Nepal are perceived their online education exposure towards faculties' perspectives is less interactive and connecting.

Therefore, this paper concludes that both students and faculties are need to learn about online pedagogy, and its learning materials to respond the challenges experienced by the Nepalese management graduate. Finally, it can be considered that preparing the curriculum based on the mixed teaching learning strategy i.e. face-to-face and online education system is an essential to combat challenges in the present situation in Nepal.

Discussion and Conclusion

The importance of the online classes has been inevitable in the present scenario. The application of ICT has enhanced the value of e-learning in recent time. This has indeed developed e-learning as an effective alternative option for the stakeholders of the education system against the traditional face-to-face classes especially in times of crisis. The technological advancement experienced in recent times made online classes both economical and practical (Gherhes et al., 2021). The current facilities made it possible to have a student from different geographical locations experience the privilege of online learning. The use of online platform has provided students, faculties and academic institutions with better flexibility of time and place of information sharing (Smedley, 2010; Arkorful and Abaidoo, 2014; José et al, 2022). Nepalese management students have recognized both advantages and drawbacks in online learning. In line with Chadda and Kaur, (2021); Gherhes et al., (2021); Dhawan (2020) has shown that both online and physical learning has their own strengths and weaknesses. Furthermore, the increasing demand of management students to acquire an education as per their flexibility of time and convenience makes online classes attractive to working students. The finding is supported by Chang et al., (2021) showing the efficiency of online learning different circumstances.

This study shows that average Nepalese management students perceive online classes as less interactive and communicative than physical classes whereas few perceive it other way around. Many empirical studies argue that the major reason behind many faculties prioritizing face-to-face class over online class is the fact that the connection or bond made with students and the degree of assessing their understanding in the physical class is much higher than that of online class (Allen & Seaman, 2006; Bower, 2001; McKenzie, et al., 2000; Omen-Early & Murphy, 2009; Oomen-Early et. al., 2008).

The study also reveals that numeric nature of the courses makes it difficult for the students to learn with practical approach. However, the majority of students find that the technology essential for operating online classes enhances the quality of the learning experience and aids in discovering new knowledge. Meanwhile, the mandatory use of computer-based technology has improved the IT knowledge of the students which is similar with the finding of Judahilet al., (2007) expressing that essential of adapting the modern technology throughout the online study has improved divergence of abilities in ICT. In line with the findings of Gedera et al. (2013), which suggest that students' engagement in online learning is influenced by the costs and limitations of the technology used, this study shows that students who find online learning complex and highly sophisticated display varied responses. Many students feel that peer learning is less effective online due to physical

distance discouraging collaborative habits. Additionally, online classes require more self-discipline, as it is easier for students to become distracted in a remote setup.

Almosa (2002) highlighted that computer-based learning provides easy access to a wide range of course materials and sources. Similarly, this study finds that management graduates are more comfortable with the study materials available online compared to those in face-to-face classes. Despite its limitations, online learning can be a productive alternative if implemented effectively. This perspective aligns with Al Gaahtani (2011), who observed that online learning can offer significant advantages over traditional face-to-face learning when executed properly. However, Arias, Swinton, and Anderson (2018) emphasized that both online and face-to-face learning can be effective if executed with accurate methodologies. The study reveals that online classes were rare in Nepal before the pandemic, but interest has significantly increased among universities and colleges. Students find that online classes enhance their technological skills along with course knowledge. Various researchers have pointed out that timely responses, clear instructions, ease of information sharing, and instructional knowledge contribute to student satisfaction in online learning (Carter et al., 2020; Gabaree et al., 2020). Technological advancements have provided numerous alternatives to traditional educational practices (Yang and Arjomand, 1999) and have facilitated the development of online teaching and learning skills (Bowen et al., 2014; Arkoful and Abaidoo, 2014). The quality of online learning depends on proper implementation and timely feedback (Abuhassna et al., 2020; Yu and Jee, 2021).

This study concludes that Nepalese universities and colleges can effectively use online platforms for teaching during and after the COVID-19 pandemic and can continue to blend online and traditional modalities post-pandemic. A proper action plan and strategy for teaching and learning activities are essential. The study also recommends organizing ICT-based activities to enhance students' technical skills and mitigate potential issues in online classes. The information provided by this paper could benefit all stakeholders in developing future strategies. This research is important for academic institutions in shaping their plans and policies and will be valuable to authorities, scholars, and academics. In conclusion, there is substantial scope for future research and further development as online classes continue to grow in Nepalese academic institutions.

Implications

The inability to run on-campus classes enforced the academic institutions to re-think about online learning environment and its pedagogy and develop a digital learning platform. As a result, the prevalence of online learning experience has transformed the mindset of university, members of faculty, and students in terms of knowledge, skills, resource, technology and learning strategy. Today, this is a global phenomenon and Nepalese higher education cannot remain untouched by it. In this context, the finding of this study discovered that most of the faculties has less knowledge about online pedagogy and learning materials. Therefore, the paper suggests that, universities and college should give timely attention towards building a technological infrastructure, skills and training opportunity for faculties and staffs for effective teaching learning experiences through online. Hence, in the time of

growing uncertainty, it is important to comprehend management institutions' plans and strategies for online education. Therefore, the findings of this study may be useful to all parties involved for their upcoming strategy.

It is recommended that the positive side of the pandemic is that it has opened door to other alternatives in the field of education, and this could just be the beginning of what is about to come. In the context of Nepal, large number of faculties were unfamiliar with digital technology and online learning resources before the crisis. Therefore, the effectiveness of online classes requires redolent design and preparation from all stakeholders involved in the education system. As such, concerned authorities, need to take timely decision to come up with sustainable solutions in this situation of dilemma. It means, there is a need for appropriate action plan with the suitability of the mixed or blended teaching-learning strategies that are essential to build a robust education especially in management education system in Nepal.

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