Perceptions, Issues, and Challenges towards Online and Alternative Examinations System: A Case of Mid-Western University

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Abstract:- Due to the worldwide impact of COVID-19, the conventional mode of teaching-learning and testing, i.e. face-to-face physical presence is completely postponed as a result educational institutions used online and alternative teaching, learning, and evaluation system. In this context, this paper attempts to explore the perception of students and teachers towards the online and alternative examination system (OAESalong with the issues and challenges. The mixed-method was used in the study usingan online survey questionnaire and focus group discussion (FGD). The major findings of the research claim that the students and teachers have a positive and satisfactory perception towards the OAES and mobile and laptops are the major devices where email and messenger are the main application they used. The challenges they faced are lack of electricity, no access to the internet, and poor connectivity along with the lack of training and skills to use the technology.

Keywords:- Examination, Online, ICT, E-learning, Alternative Examination System.

I. INTRODUCTION

The teaching-learning and evaluation system has been continuously updating nowadays. Because of the impact of the increasing use of information communication technology (ICT) in education and globalization,there is a transformative move in education. Due to the COVID-19 pandemic,almost all the academic institutions postponed their face-to-face mode of teaching-learning and evaluation activities in the world and Nepal too. In this regard, Acharya, et al. (2020) claims that the spread of the COVID-19 caused depredation to the educational system, forcing about 107 nations to shut down their schools and universities. Due to the prolonged lockdowns, educational institutions in Nepal have been temporarily closed, and UNESCO (2020) estimated that nearly nine million (8,796,624) students in Nepal are affected due to nationwide closures in response to the pandemic. Among them, 404,718 students belong to higher education institutions (p. 2). Because of the unsolved prolonged adverse situation, the academic and administrative leaders of educational institutions in general and HEIs, in particular, are forced to think towards the online and alternative teaching-learning

and examinations system. To achieve the academic calendar loss, they reformed their existing policies and programs as a result almost all the universities worldwide and Nepal have attempted to implement online and alternative teaching-learning and evaluation systems in their institutions.

Nepali education culture is dominated by face-to-face tutoring. It has a long history starting from the Gurukul culture to the present formal schooling. In this regards, Pangeni (2016) argues that emerging practices of using technology in education have been promoting online learning as a form of distance education and gaining popularity (p. 32). Theyare transferring an academic institute into a home institute in which a virtual environment of interaction, simulation, and collaboration enables students to create a world that encompasses anything students can dream up (Thamarana, 2016).

Regarding the use of ICT in the field of education Joshi (2017) claims, "ICT makes teaching more meaningful, creative, attractive and funny and encourage learners for self-learning. It opens all the doors of learning evidence" (p. 408). Moreover, it is a ground reality that not only the teachers and teacher trainers but also the students are using ICT in their teaching-learning activities in Nepal. In this respect, Dhital (2018) opines that the use of Information and Communication Technologies (ICT) in education has been considered as one of the strategies to achieve the broader goals of education in Nepal.Furthermore, Gautam & Gautam (2020) claims thatmode of teaching-learning activities are forced to be transformed from classroom teaching into online worldwide and Nepal is no exception. Nepal, irrespective of other nations, is suffering from COVID-19 in which more than 1.3 million students (UGC, 2016) of different levels have lost their regular college activities, and universities are forced to withhold their examination and intake schedules. To catch up with their academic loss, the universities and academic institutions adoptede-learning and e-assessment systems, which are being popular among the teachers and students as the regular part of their academic purpose in Nepal. In this respect,Shakya, Sharma, and Thapa (2017) claim e learningis being the popular and effective tool of teaching and learning processes now a days and the various universities of Nepal are adopting this e-

learning practice and offering for distance education or online learning.

Nepali universities, teaching on-class courses before the COVID-19 pandemic (except one i.e. Nepal Open University), have not their own online learning 'platform' generally called 'Learning Management System' (LMS). The LMS is a place designed to meet students, interact, assign, material distribution, and grading students virtually. Since no institutions have their own LMS,all most all the academic institutes are using commercial platforms like Google, Microsoft, Zoom, and others. Generally, there are two basic online teaching modes (Gautam & Gautam, 2020). Nepal Open University has been conducted its academic activities through online teaching-learning activities as usual. Kathmandu University published several noticeson the closure of the educational activities after the lockdown created by the pandemic COVID-19 and started online classes using Moodle and Google Meet (Kathmandu University, 2020). Mid-Western University formally prepared the guideline for regulating the online mode of teaching-learning and alternative mode of operating system and published it. The guideline visualized the complete cycle of the education from admission to result as e-Admission, e-Class, e-Assessment, e-Examination, and e-Certification. After the training to faculties and students, the online class conducted using a synchronous and asynchronous mode of teaching and learning using tools like Zoom, Google Meet, Google Classroom, and Moodle. Initially, the mid-term examination of all the semesters was completed andthe online examination form was announced in the first phase, and the final examination was successfully conducted for bachelors 7th and masters 3rd semester (Mid-Western University, 2020).Additionally, Tribhuvan University has started online classes through Microsoft Teams, part of Microsoft 365 for education, which holds 82% of higher education in Nepal (Acharya, et al., 2020). Initially, few faculties of Tribhuvan University in their efforts started delivering their classes online from the very beginning of lockdown in Nepal but the efforts were insufficient in terms of coverage, later Tribhuvan University formally decided to conduct online classes withholding examination schedule (Gautam & Gautam, 2020). Similarly, other universities of Nepal also gradually have conducted its teaching-learning and evaluation programs in online and alternative modes. In this contexts, this study attempts to replicate the lessons learned on the perceptions, issues, and challenges of implementing an online and alternative examination system as practiced by Mid-Western University in the mid-term examination at bachelor and master degree programs of different faculties.

II.   REVIEW OF RELATED LITERATURE

The education system is upgrading these days with advanced technologies that are from conventional learning to e-learning and this is relevant for the learner as it is providing flexibility in learning with optional choices for study to the learner with unlimited access to information (Shakya, Sharma, & Thapa, 2017, p. 10). In this regard, Sharma and Bhatta (2018) claim that the rapid developments of internet and communication technologies have materially altered many characteristics and concepts of the learning environment (p. 1). It is becoming increasingly common at many higher education institutions, offering fully online and/or hybrid/blended courses combining online instruction with face-to-face teaching (Sun & Chen, 2016, p. 157). In the context of Nepal, it has a firm policy for the introduction of information and communication technology (ICT) in education and emphasizes the need for such technology for its schooling to align with global practices (Rana, Greenwood, & Fox-Turnbull, 2019).

The examination system of any academic institution is closely associated with the educational system- curriculum, teachers, teaching and learning materials, and pedagogy. In this regard, (Ahmed, Mahmood, Ghuman, and Wain (2013) claims that the Examination system in any institution is the main source to judge the academic level of that institution. Similarly, (Jiang, Li, Li, Qin, & Zhou (2015) opines that Examinations have been an important part of teaching activities in universities, and have been an important means of evaluating teaching. The examination has been closely related to teaching, learning, as well as education quality, and student quality (p.620).Therefore, there is a close relationship between teaching and testing that supports each other. Since the conventional teaching-learning activities are in the physical and face-to-face mode in the Nepalese context, so as the examination system. However, due to the COVID-19, the face-to-face mode of examination is not possible, most of the academic institutions particularly in the case of higher education practiced in the online and alternative examination system.

Online examinations, commonly known as electronic examinations (e-exams) (Shraim, 2019, p. 185) and can be defined as "a system that involves the conduct of examinations through the web or the intranet" (Ayo, Akinyemi, Adebiyi, & Ekong, 2007, p. 126). Online learning has grown in popularity, leading to the more widespread utilization of online exams. Online exams have started to become a preferred method of assessment in both online and traditional learning environments (Ilgaz & Adanir, 2019). Electronic examinations (re-examinations) are now a viable alternative method of assessing student learning. They provide freedom of choice in terms of the location of the examination (whether examinations are running synchronously or asynchronously) and can provide immediate feedback (Fluck, Adebayo, & Abdulhamid, 2017, p. 108).

All universities of Nepal (except one – Nepal Open University) and almost all the programs have been running on-class mode of teaching since their inception before the COVID-19 pandemic. These universities were built for on-class practices, having no infrastructure and preparedness for online classes. Faculties and students were not mentally and technically prepared for the online mode of teaching and the most important element of online classes i.e. internet facility is barely reliable (Gautam & Gautam, 2020).Universities have adopted a dual evaluation system in the semester; about 40-50% of the evaluation is performed by faculty members, and the remaining evaluation is carried out by the centralized examination system of HEIs. It is the reason higher education in Nepal is severely affected by the COVID-19 pandemic because students are not allowed to move into the next levels of the academic program without attending centralized examinations (Acharya, et al., 2020).

To reflect some of the empirical studies regarding the online and alternative mode of examination, Ilgaz and Adanir (2019) studied on Providing online exams for online learners: Does it matter for them in Turkish contexts to investigate the academic achievement of online learners in online exams as compared to traditional exams and to analyze their perceptions towards online exams. They found that the majority of the learners pointed out that online exams are efficient, usable, and reliable while others indicated a level of insufficiency related to exam duration, as well as concerns about potential technical problems that may occur during the implementation of online exams. Shraim (2019) studied Online examination practices in higher education institutions: Learners' perspectives in the context of Palestine and the results show that online exams were perceived to have significant advantages over the conventional, paper-based examinations includingreliability of grading and efficiency in terms of time, effort and money spent on the exam process. Furthermore, participants raised many challenges regarding the implementation of online exams in terms of security, validity, and fairness issues. The findings also indicate that e-exams are particularly suitable for formative assessment, for measuring learning rather than the summative assessment of learning. Similarly, Fluck, Adebayo, and Abdulhamid (2017) compared an e-examination system at FUT Minna Nigeria with one in Australia, at the University of Tasmania, using case study analysis. The findings claimed that students have expressed negative opinions about electronic examinations (e-examinations) due to a fear of, or unfamiliarity with, the technology of assessment, and a lack of knowledge about the methods of e-examinations. Likewise, Ayo, Akinyemi, Adebiyi, and Ekong (2007) researched The Prospects of e-Examination Implementation in the Nigerian context and the findings revealed that the system has the potentials to eliminate some of the problems that are associated with the traditional methods of examination such as impersonation and other forms of examination malpractices. The system is easy to use and candidates can get used to it with time.

In the contexts of Nepal, Gautam & Gautam (2020) condcuted a research on Transition to Online Higher Education during COVID-19 Pandemic: Turmoil and Way Forward to Developing Country of South Asia- Nepal. The research reflected triplet as infrastructure- specific, student-specific and teacher-specific as antecedents of effectiveness of online classes to the on-class based courses during pandemic. Technological support, infrastructure availability, faculty, and students' perception have a significant relationship for the effectiveness of the online mode of the teaching learning process. Similarly, Acharya, et al. (2020) in their research entitled Internet-based Online Higher Education in Nepal Amidst COVID-19 claimed that three factors, such as institutional policy, internet access, and poverty, are found to be significant factors affecting the online higher education systems in Nepal. On the brighter side, this outbreak has brought many opportunities to reform the conventional teaching-learning paradigm in Nepal.

From the above-mentioned sample representative reviews, it can be claimed that there is no such studies related to the issue and challenges with the perception of teachers and students towards the online and alternative examination system in the Nepali higher educational contexts. Therefore, this study is worth researching reflecting the experience of students and teachers of Mid-Western University, Surkhet, Nepal regarding the implementation of the online and alternative examination system.

III.　OBJECTIVES:

The main aim of this study was to reflect the perception of the students and teachers of Mid-Western University towards the online and alternative examination system. More specifically, the objective of the research were:
a. To examine the attitude and effective implementation of online and alternative examination systems at the university level.
b. To identify the availability of the basic infrastructure and facilities used in online and alternative examination systems at the university level.
c. To explore the issues and challenges regarding the policy and implementation of online and alternative examination systems at the university level.

IV.　RESEARCH QUESTIONS:

The present study had the following research questions:
a. What do the teachers and students perceive the online and alternative examination system at the university level?
b. What basic infrastructure and facilities are available for online and alternative examination systems at the university level?
c. How do teachers and students perceive the issues and challenges regarding the policy and implementation of online and alternative examination systems at the university level?

V. DELIMITATION/LIMITATION OF THE STUDY

The study was delimited to the online and alternative examinations system implemented at central and constituent campuses of Mid-Western University, Surkhet, Nepal in Mid-term Examination, 2020. This study is only limited to the study of perceptions of students and teachers who participated in the mid-term examination via the online and alternative system and the analysis of issues and challenges of implementing it.

VI. RESEARCH DESIGN AND METHODS

The study employed a mixed-method research design. Mixed method research is an approach to analyzing qualitative and quantitative data simultaneously (Creswell, 2009). Also, he said that mixed-method design gives the researcher information on research discipline and the knowledge to find answers to research questions. Research design is a plan and way of study which provides a specific direction for procedures in the research study (Creswell, 2014). Teachers' and students' perceptions were collected via an online survey. A survey method was used to collect information directly from the student's and teacher's perceptions towards online and alternative examinations at the Mid-Western University. All teachers and students of Mid-Western University were the populations of the study.

Due to COVID-19, the university was unable to take any kind of examinations in the face to face mode as previous. In such a difficult environment, the university conducted the mid-term examination of students through online and alternative mode. An online survey was conducted to collect the perceptions of teachers and students who are directly involved in the mid-term examination. Students and teachers were not forced to take part in the online survey, they responded voluntarily to the online survey. All online survey participants were from the university teachers and students. As the Bachelor level seventh semester and Master level third semester students had a mid-term examination by online and alternative mode, they only participated in the online survey. There were 290 students and 72 teachers who participated in the online survey.

VII. DATA COLLECTION TOOL AND ANALYSIS

The concepts of the e-Assessment scale were selected as the data collection tool. Dermo (2009), developed the e-Assessment scale, the scale-covered six main dimensions: affective factors, validity, practical issues, reliability, security, and learning and teaching. The scale is structured as a Likert-type instrument consisting of very satisfactory (1), satisfactory (2), neutral (3), and not satisfactory (4). Furthermore, multiple-choice questions and yes-no questions are structured also. In total, the scale consists of 7 items within five factors. Here, the Reliability test of the perception of online and alternative examination and policy-related items by Cronbach's Alpha reliability score is 0.78 > 0.7implies that it is acceptable for the tools (George & Mallery, 2019).

Additionally, the opinions of the respondents were collected through the open-ended online survey questions regarding their opinions about online and alternative examination system. In total, 290 students and 72 teachers responded to the questions. Document analysis and focus group discussion was also done to analyze qualitative data. For the quantitative analysis, IBM's SPSS 23 software was employed. On the other hand, for the qualitative analysis, ATLAS.ti software was employed.

Table 1: Frequency and percentage of demographic data

	Variables	Students		Teachers	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Gender					
	Male	190	65.5	62	86.1
	Female	100	34.5	10	13.9
Faculty					
	Education	125	43.1	36	50.0
	Humanities	65	22.4	22	30.6
	Management	30	10.3	7	9.7
	Engineering	46	15.9	2	2.8
	Science	24	8.3	3	4.2
	Law			2	2.8
Level					
	Bachelor	155	53.4		
	Master	135	46.6		

The above Table 1 indicates that 190(65.5%) and 62(86.1%) were male respondents of students and teachers respectively. Similarly, 100(34.5%) and 10(13.9) were female respondents of students and teachers. Based on faculty, 125(43.1%),65(22.4%), 30(10.3%), 46(15.9%), and 24(8.3%) were the students' respondents of Education, Humanities, Management, Engineering, and Science respectively. Similarly, 36(50%), 22(30.6), 7(9.7%), 2(2.8), 3(4.2), and 2(2.8) were teachers' respondents of Education, Humanities, Management, Engineering and Science faculties respectively. Furthermore, there were 155(53.4%) bachelor level students and master level 135(46.6%) students as the participants in this research.

Research Question 1: What do the teachers and students feel towards the online and alternative examination system at the university level?

Table 2: Response frequency of the students and teachers towards the online and alternative examination system

	Variables	Students		Teachers	
		Frequency	Percentage (%)	Frequency	Percentage (%)
OAES					
	VS	98	33.8	9	12.5
	S	147	50.7	53	73.6
	N	37	12.8	8	11.1
	NS	8	2.8	2	2.8
Examination System					
	OAES	216	74.5	32	44.4
	FFES	74	25.5	40	55.6

OAES: Online and Alternative Examinations System
FFES: Face-to-Face Examinations (Physical Examinations) System

According to Table 2, 147 (50.7%) students answered satisfactorily to feel towards the online and alternative examination system at the university level as well as 53(73.6%) teachers answered satisfactorily to feel towards the online and alternative examination system at the university level. Even though, 8(2.8%) students answered not satisfactory to feel towards the online and alternative examination system at the university level as well as 2(2.8%) teachers answered not satisfactory to feel towards the online and alternative examination system at the university level. It is concluded that most respondents of students and teachers were satisfied with the online and alternative examination system at the university level. Similarly, 216 (74.5%) of students felt that the Online and Alternative Examinations System (OAES) is more effective than Face-to-Face Examinations (Physical Examinations) System (FFES).

Table 3: Gender of the respondents Online and alternative exam

			An online and alternative examination system				P-value
			VS	S	N	NS	
Gender of the respondents	Male	Count	69	94	22	5	0.608
		Percentage	64.2	96.3	24.2	5.2	
	Female	Count	29	53	15	3	
		Percentage	33.8	50.7	12.8	2.8	

* significant (p< 0.05)
VS: Very Satisfactory;   S: Satisfactory: Neutral; NS: Not Satisfactory

Table: 3 reported that association is not significant between males and females using Online and alternative exam at p-value 0.60. However, the participants having a level of satisfaction of male 94(93.3%) is greater than females.

What do the teachers and students perceive the practice of online and alternative examination systems at the university level?

Table 4: Frequency table of receiving/submitting way of questions paper during Mid-Term exam

	Variables	Students		Teachers	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Receiving/submitting way of questions paper during exam					
	Google classroom	37	12.8	11	15.3
	Email	119	41.0	34	47.2
	Messenger	131	45.2	27	37.5
	Others	3	1.0		
Submitting/receiving way of answer copy during the exam					
	Google classroom	24	8.3	6	8.3
	Email	222	76.6	45	62.5
	Messenger	40	13.8	20	27.8
	Telephone	2	.7		
	Physical presence	2	.7	1	1.4

According to table 3, 131(45.2%) of students used messenger for receiving way of questions during the exam whereas, 222(76.6%) of students used email for submitting way of answers copy in their exam. Similarly, the majority of teachers 34(47.2%) used email for submitting way of questions during the exam and 45(62.5) used email for receiving way of answers copy of the exam.

Research Question 2:What basic infrastructure and facilities are available for online and alternative examination systems at the university level?

Table 5: Use of devices during online and alternative examinations system

	Variables	Students		Teachers	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Use of devices during exam					
	Mobile	190	65.5	11	15.3
	Laptop	48	16.6	57	79.2
	Computer (desktop)	7	2.4	1	1.4
	Iphone	3	1.0	3	4.2
	Laptop, Iphone	1	.3		
	Mobile, Laptop	31	10.7		
	Mobile, Laptop, Computer (desktop)	6	2.1		
	Mobile, Computer (desktop)	3	1.0		

Table 4 reported that mostly students 190 (65.5%) used during online and alternative examinations system. Similarly, 57(79.2%) teachers used laptop during online and alternative examinations system.

Research Question 3: How do teachers and students perceive the issues and challenges regarding the policy and implementation of online and alternative examination system at the university level?

Table 6: Frequency of perception of teachers and students towards the policy of university towards the online and alternative examination

Variables	Students		Teachers	
	Frequency	Percentage (%)	Frequency	Percentage (%)
The policy of University towards an online and alternative way of exam				
VS	123	42.4	17	23.6
S	135	46.6	49	68.1
N	27	9.3	2	2.8
NS	5	1.7	4	5.6

Table 5, shows that 135(46.6%) of students were satisfactory towards the policy of the university towards the online and alternative examination and 49(68.1) of teachers were satisfactory towards the policy of the university towards the online and alternative examination. Even though 123(42.4%) of students were satisfactory towards the policy of the university towards the online and alternative examination and 17(23.6%) of teachers were satisfactory towards the policy of the university towards the online and alternative examination.

➢ *Result Discussion of Focus Group Discussion and Open Questionnaire*

The focus group discussion was conducted among the selected students and teachers who participated in an online and alternative examination system. Some of the representative samples of their responses are:

S1: Online and alternative examination systemsare good but there is a problem with internet and network facility.
S2: I could not understand the question and there was no one to ask while there was a problem in a technical matter.
S3: There was a lot of time for the exam, so I could not feel like the exam as we have been habituated to a time-bound physical exam.
S4: I feel happy as there was a lot of time and no pressure and fear of anyone.

From the above-sampled responses, it can be concluded that the students feel no pressure and fear of examination like in the physical face-to-face examination, though they faced internet and electricity problem.

T1: There was no tension of physical presence and monitoring the students' activities of examination like physical face-to-face examination.
T2: I feel worried about whether the students receive the question paper and send the answer copies timely. I question the reliability and validity of it.
T3: There was very difficult to check the answer copy and marking due to poor visibility.
T4: I enjoy it, as there is no extra tension after sending the question though sometimes faced poor internet connectivity.

From the above responses,it can be reported that the teachers also feel satisfied though there are challenges and issues of reliability and validity of online and alternative examination system.

The two representative sample of the opinion of two participating students in response to a survey question about what challenges did you face during online and alternative classes and examination:

S1: "In my area poor network speed. So many classes had been missed and the examinations period I have acquired questions later than other students."
S2: "Electricity is not regular and internet network problem are the main problems."

It was also revealed that the students who faced different problems during the online classes and mid-term examination found several aspects to be improved. Responses of three participants were as follows on the question, what should be done to make online and alternative classes and examinations more effective:

T1: "This time is very critical conditions so the online exam is very much effective for all students as well as the teacher."
T2: "If we should be started online classes, our curriculum must be changed and if we are going to start the online examination, we must be solve networking problem, should provide the basic knowledge and information about the technical system, ICT knowledge to the students by the campus."
S3: "The University should help internet Data package offer to those students who are far from Wi-Fi service. The online examination should be conducted fix time nor should it be a research-based question. The government should give priority to the development of infrastructures as electricity and ways of communication."

According to the participants mentioned above, during the online exam period, they seem to have problems with basic things like irregular electricity, connectivity problems, and lack of ICT knowledge. Similarly, to conduct online classes and examinations effectively, the regular electricity, policy of the university, curriculum, cheap and reliable internet service, and ICT knowledge have to be improved, this was the suggestion of the participants.

Table 7: frequency of different codes related to issues and challenges of online and alternative examination

Codes	Q1	Q2	Total
affordable data pack	0	36	36
affordable devices	0	7	7
alternative classes	1	9	10
availability of internet	0	23	23
Coordination	0	9	9
free internet	0	9	9
internet problem	66	4	70
electricity problem	65	10	75
network problem	89	2	91
no problems	10	1	11
online assessment	0	34	34
online classes	0	13	13
time bound	9	9	18
Tools	9	0	9

*Q_1: What challenges did you face during online and alternative classes and examinations?
**Q_2: What should be done to make online and alternative classes and examinations more effective?

Table 7 indicates the frequency of codes of responses of Q_1 and Q_2 by using ATLAS.ti qualitative data analysis application. The result shows that maximum students have faced problems as network problems (89), internet problems (66), and electricity problems (65). Similarly, the maximum students suggest improving the online and alternative examination system as an affordable data pack (36), online assessment (34), and availability of internet (23).

VIII. FINDINGS

As the study aims to examine the perception and effective implementation of online and alternative examination with the issues and challenges, the results of the analysis and interpretation of the collected data reflect the positive attitude towards it. Concerning the research question one, among the 290 students who participated in the online and alternative mode of mid-term exam and 72 teachers who administered the exam responded in the survey. Out of 290 students, the majority of them i.e. 50.7% responded as satisfactory and 33.8% responded as very satisfactory, whereas, out of the 72 teachers, the majority of the teachers i.e. 73.6% responded as satisfactory which reflects that online and alternative examination system is found to have positive perception by both students and teachers. In terms of comparative perception towards the OAES and FFES, out of 290 students 216(74.5%) responded on OAES effective than FFES whereas out of 72 teachers, 40(55.6%) responded as FFES is effective than OAES.

In terms of the use of electronic applications that the students used for receiving the questions in the examination the majority of them reported using Facebook messenger i.e. 131(45.2%) and email 119(41%). On the other hand, while sending the answer copy, the majority of them used email 222(76.6%) which reflects that the majority

of the students used email and messenger as the main electronic applications in the online and alternative examination. In terms of the electronic device the students and teachers use in the online and alternative examinations system, the majority of the students are found to be used mobile phone i.e. 190(65.5%) and laptop 48(16.6%) whereas the majority of the teachers used laptop i.e. 57(79.2%). Which indicates that the major electronic devices used in receiving and sending questions and answer copies are mobile phones and laptop by both the students and teachers.

Regarding the perception towards the policy of the university on online and alternative examination, i.e. research question two, the majority of the students i.e. 135(46.6%) responded as satisfactory and 123(42.4%) responded as very satisfactory. Similarly, the majority of the teachers i.e. 49(68.8%) as the satisfactory and 17(23.6%) responded as the very satisfactory which reflects the policy that the university adopted was very timely and necessary steps towards it.

Regarding the issues and challenges of implementing online and alternative examination systems, i.e. research question three, the major issues and challenges responded by students and teachers are found to be electricity, internet, and network problems. Similarly, to make the online and alternative examination more effective, they suggested making the access of internet network and electricity facilities to the students and teachers as well as the training to provide technical skills and strategies of using ICT devices.

To summarize, the findings of the research claim that teachers and students who are teaching and learning at the university level are highly motivated and interested to

participate in the online and alternative examination system. They have access to messenger and email for sending and receiving the questions and answer copies via the online and alternative mode of examination. However, there are challenges of internet access, electricity problem, and lack of training and skills to handle the technology. These findings as justified by the research in Nepalese contexts are similar to the findings from the other researches in both national and international contexts such as (Gautam & Gautam, 2020; Ilgaz & Adanir, 2019; Dhital, 2018; Fluck, Adebayo, & Abdulhamid, 2017; Jiang, Li, Li, Qin, & Zhou, 2015; Ahmed, Mahmood, Ghuman, & Wain, 2013).

IX. CONCLUSION

Transforming the conventional teaching-learning pedagogy into ICT based e-pedagogy is one of the important steps in Nepalese academia. Though the use of ICT in education is not a new concept in the Nepalese context, it has not been fully implemented as the regular part of teaching, learning, and evaluation purpose in education in general and higher education in particular rather it has been used as the complementary to the regular physical face-to-face mode. The practice of fully online and alternative modes of teaching-learning and evaluation is the new practice among the students and teachers. The perception of both students and teachers towards the OAES is the major research quest and the finding of the research justify the use ofthe online and alternative mode of examination as the majority of them responded satisfactorily. Furthermore, from the research finding it can be concluded that though there isa need and enthusiastic craze to use the online and alternative system in teaching, learning, and evaluation in education, it is necessary to make to access to electricity facilities, internet, and strong connectivity along with providing the skill-based training to both the teachers and students.

RECOMMENDATIONS

As this research is based on the online survey and focus group discussion, the findings of this research may not accurately replicate the real grounds of the research issues. To make this research more advance and reliable it is better to carry out further researches in this area with the more experimental, case study, qualitative, and based on observation. Likewise, this research recommends addressing the issues and challenges such as easy and efficient access to the internet, electricity facilities, and high-speed internet networks and providing training to both the teachers and students in the effective use of technology for educational purposes.

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