Students' Perception on the Effectiveness of Online Classes During Pandemic

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Abstract

The present study aimed at finding out students' perception on the effectiveness of online classes conducted during the pandemic situation of COVID -19. It attempted to find the students' perceptions for effective classes. I applied cross sectional survey design. For this, survey questionnaires were prepared in google form. Those students who were taking online classes at Nilkantha Multiple Campus in bachelor and master levels and education, arts and commerce faculties were selected as respondents for my research through convenience sampling procedure. Students were requested to reply the questions posted in their Facebook group of each classes. The data were collected, analyzed and interpreted by the help pie-charts and diagrams and descriptions. The result of this study indicated that respondents were not satisfied with their online classes due to low participation, lack of enough interaction, unattractive content delivery and the problems of poor internet and frequent power cut. Even though online classes were reported to be convenient in term of saving time, still the students perceived it to be less effective.

Keywords: perception, effectiveness, online classes, Covid-19, pandemic

Introduction

With the advancement of science and technology, the scope of learning has become wider. Online learning for students and teachers is one of the fastest growing trends in educational uses of technology. Emerging practices of using technology in education have been promoting online learning as a form of distance education and gaining popularity. Hughes (2002) stated that these days with enlargement of online learning environment, the provision of its opportunities is one of the most rapidly expanding areas of education and training. It shows that the growth of online learning is accelerating through the use of internet, multimedia or computer-based training.

Physical classes are obstructed due to Covid-19 so such classes are transferred

into online learning. Those who are deprived of education due to the lack of time to go to school and campus, they can be highly benefitted by this. 'These sort of classes had been conducting fully by Nepal Open University for university level students in Nepal from 2016 A.D. Now Tribhuvan University (TU), Kathmandu University (KU) and Pokhara University (PU) have also been providing online classes at university level. Many students of Nepal are joining in different Massive Open Online Courses (MOOCs) provided by the renowned university of the world' (Pangeni 2016, p.38).

Even the need of online learning suddenly increased due to the spread of corona virus in the world. As coronavirus spread, universities started launching online courses to continue teaching learning process. Most parts of the world have been suffered and usual educational system has been obstructed immensely in the first wave of Covid-19. As a result, teaching learning activities in the real classroom have not been possible, so the practice of online classes has been a cry for this pandemic situation.

Practice of Online Learning in the World

Open and distance learning was popular among the students who could not attend formal classroom learning. Before the practice of online classes, radio and television were the main tools through which distance learning was successful. But after the invention of internet technology, online learning also came into practice.

Though the concept of online learning started in 170 years ago in a correspondence course offered in Great Britain where the instructor sent lessons and received students' assignments by mail. Then University of Illinois created intranet for its students in 1960 in which students could access course materials as well as listen to recorded lectures. Likewise, Lemonade Stand was released in 1979 for Apple II where a software provided link for games (Tom, 2017).

According to Andrew (1993), online learning emerged in 1982 when the Western Behavioral Sciences Institute in La Jolla, California opened its School of Management and Strategic Studies In 1989, the University of Phoenix began offering education programs through the internet. Electronic University Network offered its first online course in 1986 and began collaborating with America online in 1992 serving as its higher education coordinator. After the invention of internet for public, Computer Assisted Learning Center (CALL) offered the first courses that we would recognize as online with real time instruction and interaction in 1994 A.D.

Then California Virtual University (CVU) was established in 1997 to provide information all about online courses available from accredited California colleges and

universities. After this, Massachusetts Institute of Technology (MIT) began offering lectures and courses materials online through its Open Course Ware Project in 2002 which was provided free of charge to anyone in the world (Peterson, 2019).

After this online teaching and learning tradition came to appear as tides in the educational field in the world. Nowadays the number of participants is growing faster. Due to the pandemic situation of Covid-19, has grown, the scope and availability of online offerings continue to expand globally. Demand for more intensive, short-term courses that provide opportunities for up-skilling has increased in the wake of MOOCs, so the present trend indicates that online learning would completely replace traditional programmes worldwide.

Practice of Online Learning in Nepal

It is the fact that Nepalese teachers and students did not have choices more than chalk and talk in classroom teaching learning in the past. Slowly and gradually, the area of teaching learning is expanding in course of time. Technology enhanced Open and Distance Learning (ODL) is another opportunity to learn for Nepalese students from distance. Teaching is not limited within boundaries of four walls of a classroom. If a learner desires to obtain knowledge, online learning, distance learning and library study are the sources.

College of Education in Nepal started adult education program through radio in 1958 which can be taken the first initiative towards distance education in Nepal. Similarly radio education teacher training project was started in 1978 by the Ministry of Education (MoE) with the technical and financial support from (United States Agency for International Development (USAID). It focused on enhancing the professional capabilities of in-service primary teachers having qualification under School Leaving Certificate, (Dixit, 2009). After Distance Education Centre (DEC) was established under MoE in 1994, many professional trainings and supporting courses had been provided.

Likewise, Indira Gandhi National Open University (IGNOU), International Centre for Academics (ICA), College of Distance Education and Online Studies have been offering various degree programs through ODL mode in Nepal since 2002 (Pangeni, 2016). This could also be an evidence that the culture of ODL is being developed in Nepal. Through distance education, access to educational opportunities can be increased regardless of geographically challenged groups of learners; flexibility of time and pace and place of study is guaranteed; teaching learning is individualized;

students are free to choose their own learning environment; and learners take responsibility for the pace of learning (Poudel, 2006).

Tribhuvan University has been providing resourceful e-library, conducting virtual classes, ensuring access and equity in higher education, providing professional and non-academic courses, training education professionals in e-learning, e-pedagogy, e-education and e-management, generating research based new knowledge, developing and using economically viable open and distance Learning Management System (LMS), and developing national and international relation with ODL has been provided to promote higher education (Tribhuvan University Open and Distance Education Centre, 2015).

Due to the support of the internet facility and availability of MOOCs and other online platforms, many students from Nepal have got chances in ODL programs offered by different universities around the world (Pangeni, 2016). In the pandemic period of Covid-19, there is no possibility of having classroom learning so academic institutions are practising online classes.

Covid -19 and Online Learning

Some of the universities like TU and KU had been running online programmes on regular basis. Some other educational institutions had also been conducting training and webinar through online. When the provision of lockdown had been lengthening then schools and colleges started practising online classes to their students. It was really a new practice in case of teaching learning on regular basis. Though there were few participants in those classes it was really a compulsion to manage the class as alternative way of learning. As Bejjar and Boujelbene (2014, p.5) defined e-learning as the 'use of Information Communication and Technology (ICT), online media and web technologies for learning.' Online media and web technologies were urgent need of those institutions because this sort of pandemic situation was the first experience for Nepal.

Criteria for Assessing Effectiveness

The researchers in this field have divided the criteria of evaluation into process, impact and outcome. Process evaluation mainly assesses delivery of the learning program, its quality, and satisfaction of participants but impact evaluation mainly focuses on whether objectives of the programme are fulfilled or not. Then, outcome evaluation assesses the extent to which the goals of learning program have been achieved. According to O'Neill, Addy and Roche (2004), "outcome evaluations are typically conducted after training has been completed. Evaluation, at this level, is

designed to assess change in participants' work practices, and the factors that influence participants' capacity to transfer their training to work practice".

Several evaluation models can be applied for assessing the effectiveness of online learning. At the workshop for "Evaluating Online Learning: Frameworks and Perspectives" organized on 22 September 2002, Bonk and Dennen (2002) summarized that there are three existing evaluation methods which are as follows:

Objectives –oriented Evaluation

From this sort of model of evaluation, we can find out whether the objectives are being fulfilled or not. According to Bonk and Dennen (2002), objectives-oriented evaluation is to compare learning results to online learning objectives. This is called goal driven evaluation. The appropriateness of objectives can be judged through this.

Context, Input, Process and Product (CIPP) Model

CIPP model assesses the online learning from management view point so this model is called management –oriented model. The programme can be assessed by using formative and summative evaluations. This model was presented by Stufflebeam (2003) as follows: "Context evaluation assesses needs, problems, assets, and opportunities to help decision makers define goals and priorities and help the broader group of users judge goals, priorities, and outcomes" (Stufflebeam, 2003). It compares the real environment of online learning to the ideal. "Input evaluation assesses alternative approaches, competing action plans, staffing plans, and budgets for their feasibility and potential cost-effectiveness to meet targeted needs and achieve goals" (Stufflebeam, 2003). "Process evaluation assesses the implementation of plans to help staff carry out activities and later help the broad group of users judge program performance and interpret outcomes" (Stufflebeam, 2003). In online learning, it examines how well the implementation works. "Product evaluation identifies and assesses outcomes to help a staff keep an enterprise focused on achieving important outcomes and ultimately to help the broader group of users gauge the effort's success in meeting targeted needs" (Stufflebeam, 2003).

Kirkpatrick's Evaluation Model

The model developed by Kirkpatrick in 1998 assesses reaction, learning, behaviour and result of the learners. It is effective for judging effectiveness of online learning. Reaction measures how well the trainees liked a particular learning program at the end of course. Similarly, reactions are measured during the learning. Learning measures what knowledge and skills did the trainees get. It can be measured during and

at the end of learning. Behaviour measures changes in on-the-job behaviour. This evaluation of changes is measured in work place.

The given model is the major criteria of evaluation of online learning which is basis of my research questionnaire and criteria for evaluating the effectiveness. The students had responded about online learning on the basis of criteria that I have prepared being based on aforementioned process.

Theoretical Background of the Study

Science and technology has brought great substantial changes in every field so teaching and learning also can't be far from this. The process of change is in fast in pace. E-learning system is seen as essential need for every schools and campuses so these institutions are investing more and more in online systems and devices (Popovici & Mironov, 2015).

As it has been growing the significance of online learning, the researchers are developing new theories for the effective online learning. They have been facing challenges too. The theories evolved are as follows:

Community of Inquiry (CoI)

The model for online learning was developed by Garrison, Anderson & Archer in 2000. It has become a popular model for online learning which helps to make the class interactive among teachers and students. The learners heavily use various interactive tools like discussion boards, blogs, videoconferencing, quizziz etc. This creates active learning environment. It is based on the concept of three distinct "presences"; cognitive, social, and teaching models for online and blended courses.

Connectivism

Siemens (2004), one of the early MOOCs pioneers, has developed the theory of connectivism. This model brings a change in learners to obtain information. They get ample opportunities of obtaining great amount of information and data from communications networks. Internet technology has moved learning from internal, individualistic activities to group, community, and even crowd activities. He has also taken some concepts from Barabasi and the power of networks and (Stephensen, 1998).

Online Collaborative Learning (OCL)

The theory was proposed by Linda Harasim which focuses on the facilities of internet to create conducive environment for collaborative learning. Harasim describes OCL as: "a new theory of learning that focuses on collaborative learning, knowledge

building, and internet use as a means to reshape formal, non-formal, and informal education for the Knowledge Age" (Harasim, 2012, p. 81).

There are three phases of knowledge construction through discourse; Idea generating is he brainstorming phase, where divergent thoughts are gathered. Idea organizing is the phase where ideas are compared, analysed and categorized through discussion and argument theories and frameworks for online education. Intellectual convergence is the phase where intellectual synthesis and consensus occurs, including agree to disagree, usually through an assignment, essay, or other joint piece of work (Harasim, 2012, p. 82).

This theory focuses on the interaction between instructors and learners that encourages them to solve problems collaboratively. The teacher plays the role of active facilitator and the learners build knowledge by brainstorming, analyzing and arguing. The theories regarding online learning are the bases for my research. The criteria have been prepared from the key points mentioned in the theories. Single theoretical aspect is not sufficient to study in this pandemic situation, so the study adopted the criteria separately.

Empirical Background to the Study

Several studies have been done comparing online learning with face-to-face learning. Some of them have only focused on the effectiveness of online classes run by educational institutions. But the research on online learning at the period of pandemic is very rare. Findings of the research at normal time certainly differs from pandemic period.

Some of the researches have also shown that there was no difference in learning due to the medium. A comprehensive research bibliography on online learning has received much attention. "The No Significant Difference Phenomenon" (Russell, 1999) provided one of the most frequently quoted rationales for the power of online learning. This research demonstrated that "no significant difference could be found no matter what medium is used for learning". The findings demonstrated that even with no instructor or face-to-face interaction, "there are no significant differences in the amount of content.

McLaren (2004) found significant differences in persistence between two instructional modes, though no significant performance difference was noted as measured by the final grade. Carr (2000) reported dropout rates as high as 80% in online classes and suggested a rule of thumb that course completion rates are often 10 to 20%

higher in usual course. Harrington (1999) compared classroom and online statistics instruction for masters-level social work students and suggested that students who previously have been successful academically can do just as well with a distance learning approach as can students in a physical classroom.

The research carried out by Neuhauser (2002) comparing face to face learning and online learning revealed that there was no significant differences in test scores, assignments, participation grades, and final grades. 96% of the online students found the course to be either as effective as or more effective to their learning than their typical face-to-face course. The study showed that equivalent learning activities can be equally effective for online and face-to-face learner.

On the other hand, we can find positive result in online learning. Hess and Blomeyer (2005) the first meta-analysis of online education outcomes focused entirely on K–12 education, *The Effects of Distance Education on K–12 Student Outcomes: a Meta-Analysis*. The meta-analysis found that virtual instruction produced results measuring student achievement that were as good as or better than traditional face-to-face instruction.

National Survey of Student Engagement (NSSE, 2008) study found that online learners reported deeper approaches to learning than classroom-based learners and experienced ―better use of higher order thinking skills, integrative thinking, and reflective learning. A list of effectiveness studies is included at the conclusion of the research paper.

Another research was carried out by Liu in 2003. This research was designed to compare the effects of online instruction comparing with traditional instruction on students' learning in two different sections (online section and traditional section) of a graduate course in 2003. The experimental research indicated that there was a significant difference in learning outcomes between online and traditional learners. This study did not support the "No Significant Difference Phenomenon" described by Russell in1999 (Liu, 2005).

Some of the researches have been done at the time of lockdown due to covid-19. From the time of the outbreak of Covid-19, people have been impacted in one way or the other. Countrywide lockdown has strongly impacted on the lives of people of all occupations and all ages. That also affected the education system across the world and has altered the lives of 1,576,021,818 learners in 188 countries (UNESCO, 2020). The lockdown has put an unprecedented challenge on the governments to ensure that there

should be continuity of learning (Chang & Yano, 2020).

The most common practice had been the initiation of online classes to help maintain a healthy learning schedule for the children. Applications like Zoom and Google Classroom have come in handy and most children are found listening and taking notes at least a couple of hours during the days. Announcements and more passive interaction are being maintained via Home Learning in Times of Covid social media platforms of Facebook and WhatsApp (Bhamani, Makhdoom, Bharuchi,Ali, Kaleem & Ahmed, 2020).

Online learning can be effective in digitally advanced countries (Basilaia & Kvavadze, 2020) which is why in Pakistan it is ineffective. However, in Pakistan, a significant deal of learning and teaching, as well as administrative activities of academic institutions are handled manually (Salam, Jianqiu, Pathan, & Lei, 2017).

In Deepika Nambiar's study of 2020 'The impact of online learning during Covid-19: students' and teachers' perspective', the research showed that 87.1% of the students reported that they preferred classroom teaching mode to online teaching mode. Only 12.9% preferred online classes. This shows that most of the students enjoy classroom teaching rather than online teaching.

Muthuprasad et al. (2021) found that learner's feedback is considered as the essential aspect to be analyzed to evaluate the effectiveness of online classes. The instructor's ability to manage the class, interact with students, make students involved in the classes and be familiar with the technology are identified as favorable factors of online education. It indicates that the effectiveness of online classes depend upon the management and ability of the teacher and familiarity of the students with technology.

Methodology

I adopted survey research design for this study .According to Nunan (1992, p.140) "the main purpose of survey research is to obtain a snapshot of condition, attitudes and events at a single point of time. Survey research is systematic and scientific to research in which the researcher uses statistical tools for the findings People believe that this one is more reliable because of its objectivity and value free Here, I used cross-sectional survey design to evaluate online classes administered by the campus. The data were taken at a time through google form from 61 participants who were taking online classes in Bachelor level and Master level in 2020.

Cross-sectional study design is used for population-based surveys and for assessing any programmes conducted by any institutions. They are procedures in

quantitative research in which investigators do survey in a sample or in entire population. This study also applied this design to find out effectiveness of the online classes run at the pandemic situation of Covid-19. I applied purposive sampling procedure for selecting participants in data collection phase. Due to the time of lockdown of Covid-19, it was not possible to obtain data from the respondents through physical visit so I used google form to receive my data. I took help from the lecturers who were conducting online classes at various levels and collected the names of Facebook groups. I shared survey questionnaire to all the groups and requested them to fill up and submit. 45 students from bachelor and 16 students from master level responded for my study
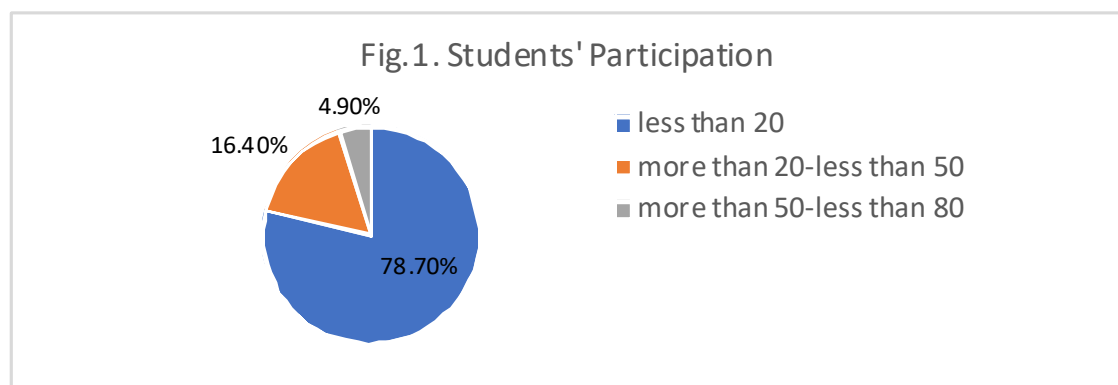
Students at bachelor and master level who were taking online classes administered by Nilkantha Multiple Campus, Dhading were the primary source of my data.

Results

On the basis of ideas mentioned in online theories like Community of Inquiry (COI), Online Collaborative Learning (OCL), and Connectivism, the given criteria had been made. The results had been drawn after interpreting responses given by the respondents on the following subject matters. It has presented the results of the study related to students' perceptions on the effectiveness of online classes provided by Nilkantha Multiple Campus.

Students' Participation

Students' participation is a major part of teaching which reflects a sort of effectiveness of the programme. It was the true fact that due to the pandemic situation of Covid-19 participation of all students in online classes was not possible but how much percentage of students were taking class was also a matter of search.

Fig.1. Students' Participation

- less than 20
- more than 20-less than 50
- more than 50-less than 80

4.90%
16.40%
78.70%

The pie-chart vividly shows that limited number of participants were involved in online classes run by the campus. The reason might be due to the lack of internet access, electricity facility and gadgets availability. 78.7% respondents mentioned that there were less than 20% students involving into their online classes. Among 61, 4.90% students responded that they had more than 50% students in their online class. It shows that the classes conducted through online mode have very low participation.

Interaction

Student engagement is important for effective online classes. This includes discussion, group dynamics, providing feedback, and engaging students. Moore (1989) developed a theoretical framework for distance education interactions which includes teacher-student, student-student, and student-content. So, interaction has always been valued in online education. The teacher can use a lot of digital tools for social engagement.

Fig.2. Level of interaction
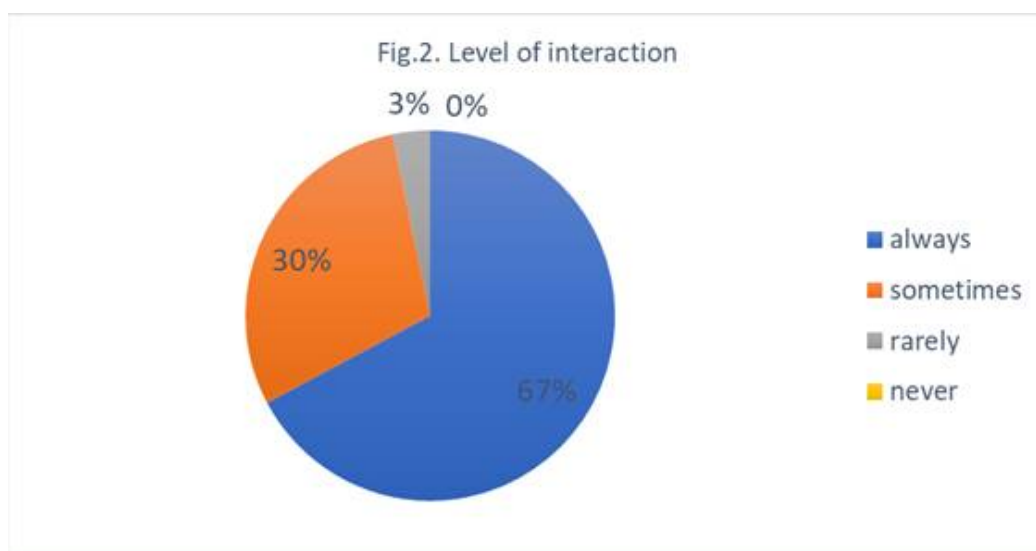
The pie chart mentioned above has shown that most of the respondents of my research (67%) responded that the teachers always allowed the students for discussion. 30% students mentioned that sometimes they could discuss in online classes. None of the students responded that there was no discussion in class which showed that all the teachers engaged their students in discussions in subject matter. Community of inquiry theory of online learning also has heavily focused on the sufficient amount of interaction among the students by using different tools.

Content Delivery

Content delivery is one the most challenging aspects in online teaching. It is the heart of any teaching programme. Online collaborative learning theory focuses on the quality of contents and teachers' ability to use various technologies in the classroom. Students' success and satisfaction depend upon the way of content delivery. Online content delivery is different from face-to-face content delivery. We need to focus on the size of letters, use of slides, audio-visual aids and assignments.

Use of Slides and Multimedia Resources

Using slides and other digital tools in online classroom is common phenomenon. Only discussion without power point presentation cannot enhance the quality of education. Various types of tools like Quizizz, Proprofs, Kahoo are being used in online classes. CoI theory has emphasized the uses of interactive platforms of social media.

The study shows that most of the teachers were using slides and only few teachers were conducting classes only through discussion. Very few digital tools were used by the teachers.

Use of Audio Visual Aids

In order to present any teaching items effectively and let them transfer into long term memory, we need to use various types of audio-visual aids in our class. Audio-visual materials help to encourage encoding information.

According to Dual-coding theory (Paivio, 1986), information received in different modes (textual and visual) will be processed better than that presented in a single mode (text). Dual-coded information is processed in different parts of the brain, resulting in more encoding.

Fig.3. Use of Audio-visual aids

- Always — 19.7%
- sometimes — 54.1%
- rarely — 8.2%
- never — 18%
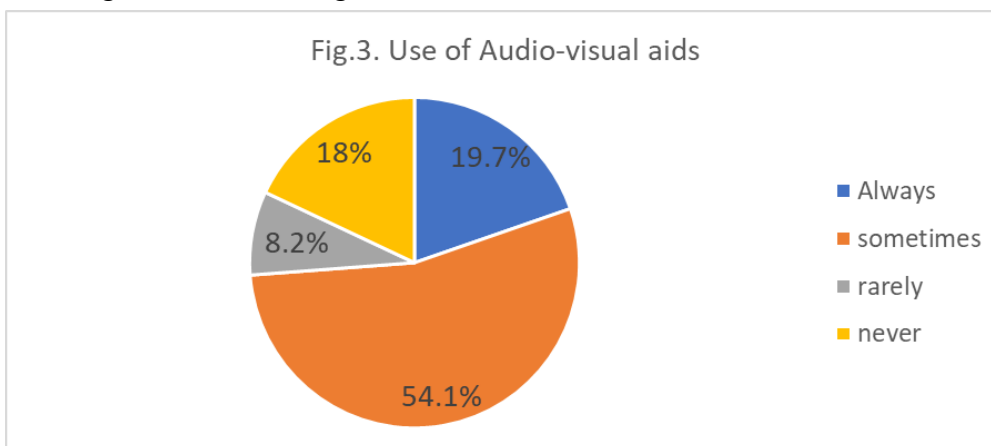
The pie chart has shown the responses of the students about the use of audio-visual aids by the lecturers in online classes during pandemic situation of COVID-19. It revealed the fact that sometimes most of the lecturers use only audio-visual aids in online classes. So, majority of the students responded that teachers used audio-visual aids sometimes only. Only 19.7% respondents said that audio-visual aids were used in every classes. 18% students said that audio-visuals were never used by the teachers in online classes. It showed that the teachers had low knowledge and experience of using various materials through online modes.

Assignment

Providing assignment is also a major part of online learning that increases students' engagement in learning. The assignments like reading texts, posting discussion answers, watching and analyzing visuals, preparing reports, doing group projects and taking quizzes and tests can be given for the effectiveness of the online classes.
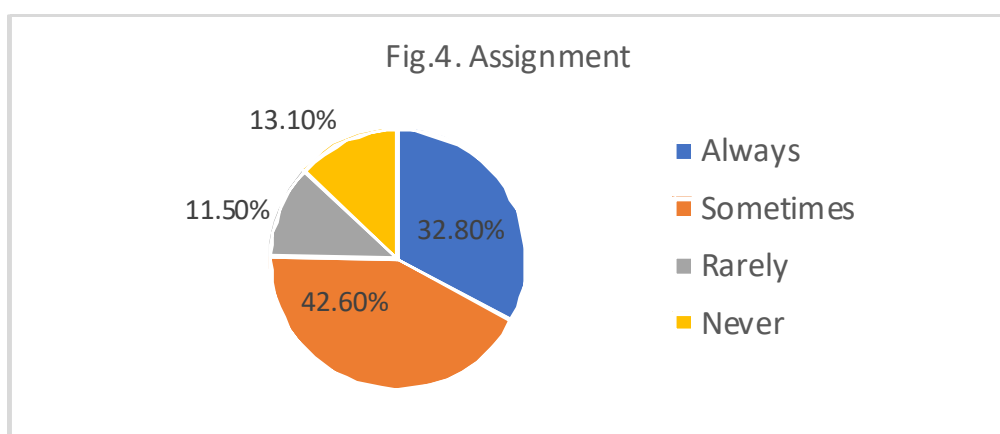

Fig.4. Assignment

42.60% have mentioned that assignment has been given and checked only sometimes by the teachers in online classes. Similarly, some of them (32.80%) responded that assignment has always been given. Likewise, 11.50% students said that it has been given rarely and other 13.10% students mentioned that assignment has been given rarely by their teachers in their online classes. The results demonstrated that all of the teachers have not given assignment daily.

Students' Satisfaction

Students have to be satisfied in order to gain sufficient knowledge provided by the teacher. They have to enjoy on them. We can measure the effectiveness of any programme through the satisfaction level of participants. The chart mentioned below

has shown whether the students in online classes were satisfied in content delivery or not.

Fig.5. Students' satisfaction
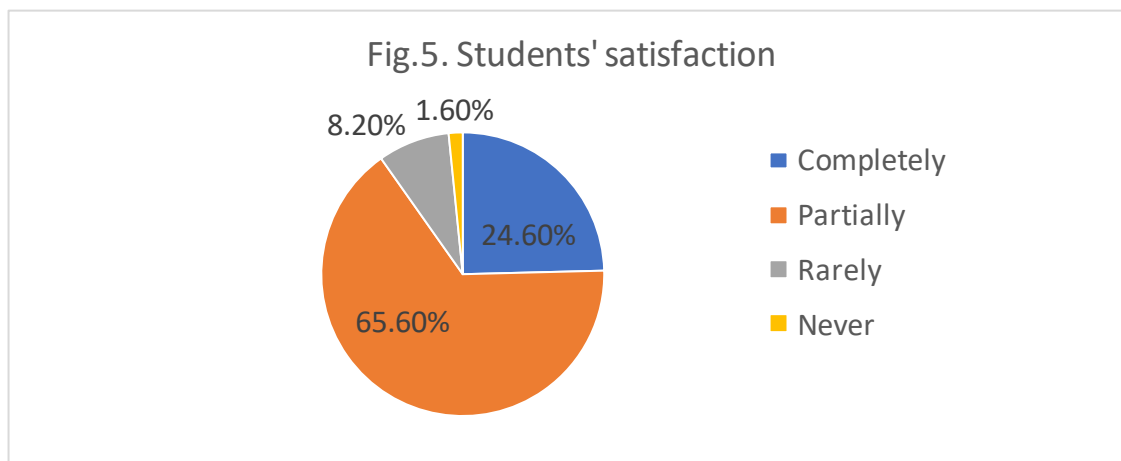
The figure above showed the level of satisfaction in students about the online classes taken by the teachers of Nilkantha Multiple Campus during pandemic situation of Covid-19. Large number of students (65.60%) had partially satisfied with the contents provided to them where only 1.60% students never satisfied with it. Among 61 respondents, 15 students (24.60%) responded that they were completely satisfied with the content provided through online classes. This finding also has shown that students were not fully satisfied with online classes.

Evaluation

Teaching and evaluation are two inseparable terms. In order to find out effectiveness of any programme, we need to evaluate the achievement of the participants. The study has tried to demonstrate whether the teachers used evaluation tools in course of online classes or not.
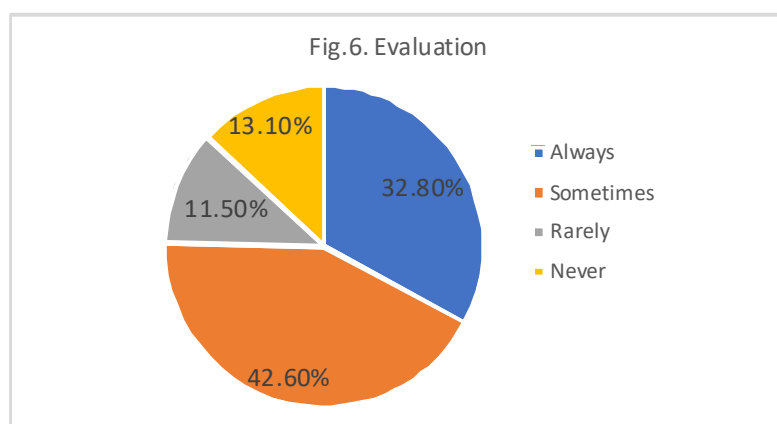
Fig.6. Evaluation

The figure 7 clearly shows that though evaluation must be done for the effectiveness of online classes, some of the teachers had not used evaluation procedures. 11.50% respondents mentioned that their teachers had conducted tests rarely in their online classes. Similarly, largest number of respondents that is 42.60% were assessed sometimes by their teachers. 32.80% students responded that tests were done always in their daily online classes. The finding has shown that all the teachers were not using testing tools properly.

Preferred Mode of Teaching

Students' response towards online learning is a major part in assessing effectiveness. The majority in preference determines the level of satisfaction towards any programme. So the option of face-to-face teaching and online learning had been given to the respondents from which the effectiveness has been judged.
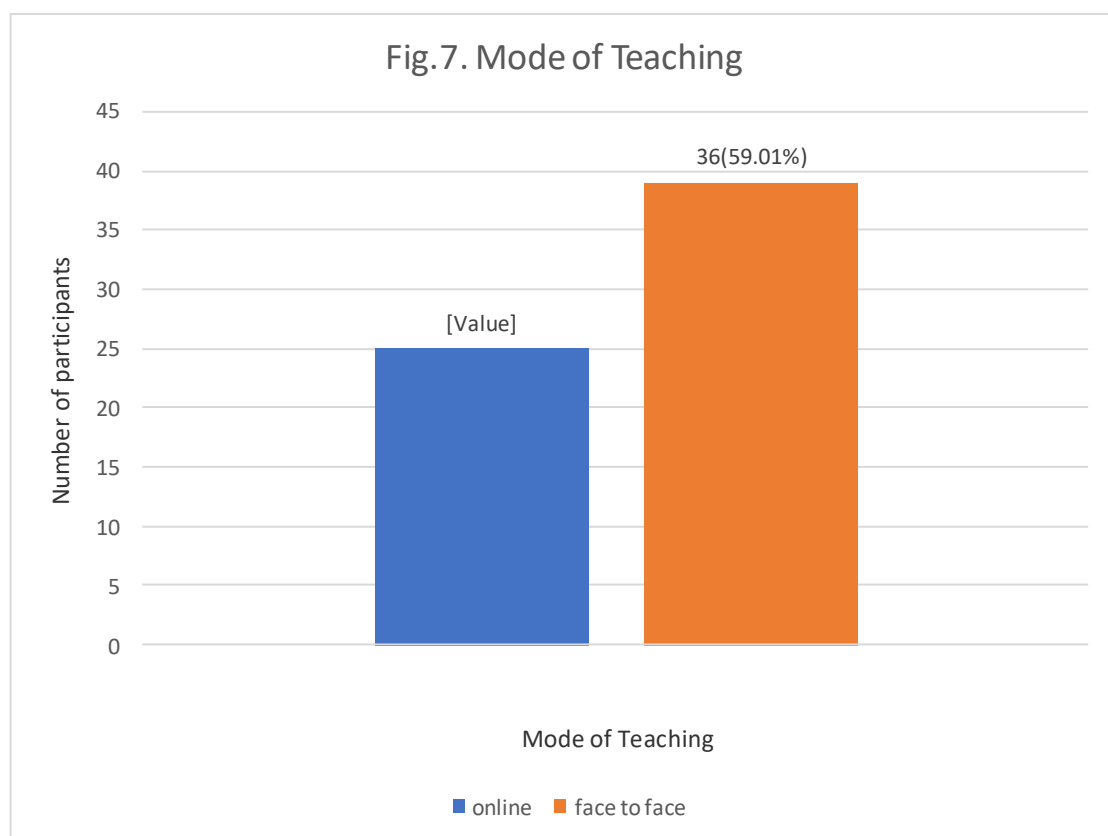

All the respondents were asked to choose whether they preferred online or face-to-face classes. Among them 36 respondents (59.01%) preferred face to face teaching while other 25 (40.98%) respondents liked online classes. The finding showed that

majority of the students preferred real teaching to online teaching.

Main Problems in Online Classes

Online learning is itself a new practice for almost all the educational institutions in Nepal. It is possible only when there is the availability of internet to all students. Lots of problems are faced by the students who take online classes because of the lack of proper environment. In the absence of face-to-face interaction among teachers and students, the learning is passive. The major problems faced during the online classes according to the respondents are as follows:-

Fig.8. Problems
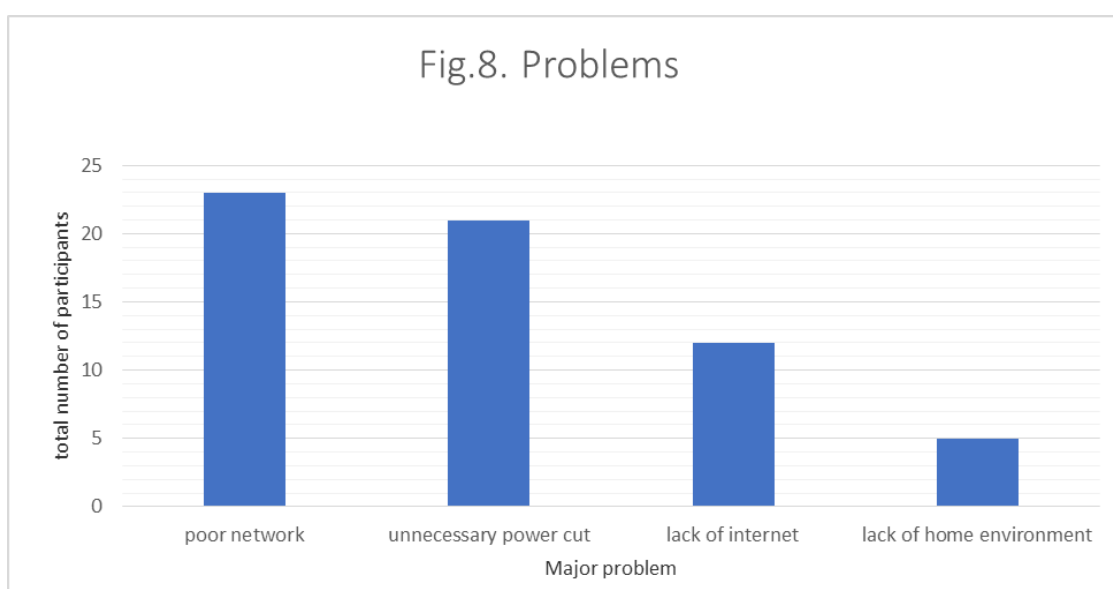
The figure 8. suggests that the chief problem of conducting online classes in Nepal is poor network of the internet. The internet service is unstable. 23 students out of 61 faced great problem of unstable internet. Similarly, 21 respondents mentioned that unnecessary power-cut is also a major problem and some of them also expressed that lack of internet service and lack of conducive home environment were their main problems at the time of online classes.

Discussion

Some studies have been done to find out the effectiveness of online classes earlier but researches were very rare at such type of pandemic situation due to the problem of social distancing. Due to widespread of Covid-19, the whole world had been suffered turning from normal into abnormal. Though online classes were common for developed countries, it was new for many developing and under-developed countries

like Nepal.

In Nepal, open and distance learning system was prevailing but pure online education system had been adopted by NOU, TU and KU (Poudel, 2006). Many learners of Nepal were taking MOOCs through various universities of the world. But now even schools and campuses of Nepal are practising online classes as alternative way of learning. Due to internet access, awareness and new practices, the effectiveness was in question. So, this study was done for solving the query of the people.

I found no uniformity in the criteria for judging the effectiveness. According to Bonk and Dennen (2002), we can find out the effectiveness of online classes on the basis of the fulfilment of objectives. Similarly, according to Stufflebeam (2003) we need to do context evaluation, input evaluation, process evaluation and product evaluation for assessing any classes and Kirkpatrick (1998) model has emphasized in assessing reaction, learning, behaviour and results of the learners.

I tried to find out the students' perceptions on the effectiveness by including the criteria like number of participants, level of interaction and discussion, content delivery, provision of assessment and mainly satisfaction level of students. However comparative result analysis has not been done due to the lack of valid tests conducted by the teachers.

The result shows that very few students were participating in online classes. The campus has to work out a lot to increase the number of students in online classes in the days to come. The campus could not provide technical support to the teachers to handle effective classes. Very few slides were being used by them. The students were mentioning various problems regarding online classes like poor network, lack of internet access, lack of conducive environment at home and unnecessary power-cut. Another major criterion for assessing the programme is the involvement of students in online classes to make it more interactive. Most of the students responded that they got a lot of chances to engage in interaction. But the teachers could not use interactive applications in online modes.

A bitter reality revealed by the findings was that 59.1% respondents had preferred face to face class to online class.

From this, we can infer that they were not fully satisfied with online classes. Though the teachers were using slides and audio visual aids in their classrooms, the satisfaction level of students was not high due to the lack of online activities, provision of online tests and so on. Although some of studies done in normal time showed

effective online classes but this study shows that they were ineffective in many criteria like level of participation, satisfaction level and mode of teaching they preferred. It might be the cause of abnormal time. But the finding shows that use of audio-visual aids, use of slides, and level of interaction were satisfactory.

The study revealed that face- to- face learning was taken more positively by the students than online learning in term of presence, interaction, satisfaction and content delivery. Even though online classes were reported to be convenient in term of saving time, still the students perceived it to be less effective and structured when compared to classroom mode of learning in context of NMC.

Conclusions and Recommendations

The present study was designed to find out the students' perception towards effectiveness of online classes conducted by NMC. Although online teaching is considered as an effective means of teaching in this pandemic situation, it revealed that students were less favorable toward online classes due to few participants, less satisfaction, lack of enough tests and activities, technical problems, unnecessary power cut, lack of internet access and lack of conducive environment at home and network connectivity issues. The students perceived it to be less effective and structured when compared to classroom mode of learning. It has shown that lots of interactions are needed for the effectiveness of online classes.

The study is beneficial for those who want to study the effectiveness of online classes. They will get assessing criteria from the study. It is equally significant for academic institution and also researchers. This study supports to the policy makers, practitioners and further researches.

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