Integration of Technology during the COVID-19 Pandemic at Public Campuses of Nepal: Students' and Teachers' Voices and Experiences

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Abstract
 Needless to say, most of the educational institutions in Nepal are based on conventional modes of learning, this means to say, they have been adopting traditional face-to-face lecturing in the classrooms. Although, some of the institutions have blended their modes of teaching and are attempting to transform it into digitalization in the name of online classes, still majority of the institutions are stuck with old fashioned strategies. After the advent of COVID-19, the utmost affected sector in Nepal is education and most of the academic institutions here are abruptly enforced to transform the students from traditional world (i.e. offline world) to the digital world (i.e. online world). Public Campuses of Nepal also cannot remain alone without entering to this world and have been running online classes in different parts of the country during the COVID-19 pandemic. In this applauding step of public campuses of Nepal, students and teachers have various perspectives and, therefore, this paper primarily aims at exploring their voices and experiences on technology integration in the classroom settings during the COVID-19 pandemic. The study was framed under qualitative research design that employed three purposively specified groups of teachers from the different faculties of public campuses of Nepal to gather data and three master's and bachelor's level students groups respectively. The research revealed that almost all the teachers had positive voices and experiences. However, there were mixed experiences and voices from the students' sides. This reveals that the campus administration, the teachers and the stakeholders have to forward their necessary steps to address their voices.
Key Words: COVID-19, technology integration, NPCA, students, teachers, voices, experiences, issues, challenges
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I. INTRODUCTION
Everything was okay. The days were running smoothly and people were busy on their own activities. But the spread of corona virus has ruined everything. Almost all the countries and territories have been victimized by the corona virus. Most of the countries and regions implemented lockdowns and shut down colleges, schools, airports, business malls etc. to forbid human crowd. It imposed us to stay inside the four walls only. This lockdown period created confusion and distress among the people. And slowly and gradually it also taught us to run our daily activities along with COVID-19 applying different defensive strategies against it. This situation resulted essence of technology in many sectors like education, health, business and so on. Therefore, education also cannot remain untouched with this pandemic. So, in this COVID-19 period, the term "technology" and "education" have been the two sides of the same coin. It clearly hints us that there has been reciprocal relationship between these two terms. In the absence of one another becomes meaningless. Thus, integration of technology in education has been the global requirement to replace the traditional teaching methods. Similarly, in the present era of science and technology, the global pedagogic system has also successfully adapted technologies based instruction. The effective application of modern gadgets, materials and technology has become crucial in classrooms. Furthermore, technology based instruction promotes learners autonomy too. They will be ready to take responsibility for their own learning and technology based instruction plays significant role for the overall developments of learners like cognitive, social and individual. In the words of Salehi &Salehi (2011) we can assume that the inclusion of new and innovative technologies in educational places has greatly transformed the constructing knowledge. Therefore, the present pandemic COVID-19 has provided an opportunity to integrate technology in educational institutions. We are still fighting against it. Therefore, integration of technology can be an effective weapon against COVID-19 to protect education and many other sectors too.

In the context of Nepal, COVID- 19 has adversely affected education system and the estimate of UNESCO (2020) also reveals that approximately nine million (8,796,624) students in Nepal are affected due to closure of schools and universities in response to the pandemic. Hence, in Nepal too, the concept of technology based instruction or e-learning evoked and, thus, realizing the essence of integration of technology in teaching learning activities during the COVID-19 pandemic, public campuses of Nepal have also taken initiation to continue teaching and learning activities effectively and efficiently. Nepal Public Campus Association (NPCA) and University Grants Commission (UGC) have been assisting to the community campuses of Nepal during the pandemic period and have been facilitating to run online classes effectively. NPCA, as being an umbrella organization of different public campuses of Nepal, was established in 1991 and has more than 540 community campuses as its members. The campuses are very partially supported by the University Grants Commission (UGC) of Nepal and it is completely insufficient to run the campuses. Additionally, it is not only the problem of inadequate amount of grants provided by the UGC to the community campuses of Nepal but also the different challenging factors like having no infrastructures, lack of mentally and technically preparedness, accessibility of internet etc. are the major black clouds covered with many other issues to the campuses. Thus, despite of these kinds of challenging factors, most of the public campuses of Nepal have implemented online classes following the protocols of different universities for different levels and faculties of the campuses. To do so, they have invested physically, economically and psychologically with the combine efforts of each and every body. Most importantly, the campuses have realized, though there are many issues related to technology based instructions, such integration of technology in teaching learning activities during the pandemic period has been the third eye to show the digital world to their students, faculty members and others. Therefore, technology integrated instruction has played remarkable role for the continuation of teaching learning activities in different parts of the country.

There are numerous researches and studies carried out across Nepal related to students' and teachers' perceptions on integration of technology during COVID-19 at educational settings but there is very least number of studies that are conducted in Nepal are partially related to this study. Therefore, this study is unique in one respect and plays significant role to fill the existing gap of the former researches in another respect.

The present study primarily focuses on students' and teachers' voices and experiences on technology integrated instructions during the pandemic of COVID-19 at public campuses of Nepal. Similarly, the obstacles of technology based instructions during the pandemic at the campuses of Nepal, different practices of technology based instruction in different countries of the world during the scenario of COVID -19 and strategies of the community campuses to overcome this situation are the secondary concerns of the study. By doing so, the present study can be fruitful insight for the police makers, teachers, students and stakeholders of community campuses of Nepal.

II.   REVIEW OF LITERATURE
In the present technological world of instruction, integration of technology is growing with various kinds of technological innovations. It has become the highway of knowledge transfer in different countries of the world. Because of excessive use of technologies in the classrooms, the traditional mode of instruction has been shifting from the offline instruction to online instruction slowly and gradually.

Technology integration nowadays has gone through innovations and transformed our societies that have totally changed the way people think (Grabe, 2007). Ghavifekr, Afshri & Amla Salleh (2012) have opined that the educational institutions which are supposed to prepare students to live in "a knowledge society" need to consider technology integration in their curriculum. Teachers can be the change makers and can facilitate their students to let into the digital world and this kind of instruction makes teaching and learning environment dynamic and proactive. Process of adoption of technology in teaching learning environment is not a single step, but it is ongoing and continuous steps that fully support teaching and learning and information resources (Young, 2003). Similarly, Gonglewski (2003) noted that technology based instruction promotes student-centered learning and focuses on learner autonomy. It hints that the learners themselves will be responsible in their learning if the teaching learning activities are blended with technologies.

Blachowicz et al. (2009) have carried out research to observe students' and teachers' perception on use of technology in the classrooms. They framed computer assisted literacy program to teach reading skill to the students. The result displayed that the students were highly interested and was active participation of student to accomplish the given tasks effortlessly.

Tilfarlioglu (2011) from Turkey studied to find out the perception and attitudes of students on use of English in Web 2.0 technology. He had selected 534 students as the population of the study from different universities and schools of Turkey and Iraq. The result showed the positive attitude and had positive perceptions towards the use of Web 2.0 technology in learning process.

In the context of Nepal too, some researchers have conducted studies on the perceptions of students and teachers towards integration of technology in instruction. Similarly, some of the studies also have focused on effectiveness of technology integrated instruction during the COVID-19 period.

Singh (2019) has carried research on students' perspectives on technology integration in ELT. The study was famed under qualitative research design. She had selected six groups of students from Kathmandu valley studying at different public schools. The result revealed that integration of technology in ELT classroom is the dire need of the students. Additionally, the result displayed active participation of students in the ELT classrooms.

Thapaliya (2014) carried out research among secondary level English teachers from different public schools of Nepal to explore their perceptions on integration of technologies in the ELT classrooms. The researcher found the uses of different technologies like mobile phones, computer, television, tape recorder etc as the most widely used technologies in the ELT classrooms. Similarly, the researcher found positive attitude towards the use of technologies in the ELT classrooms.

Dawadi et al. (2020) studied on impact of COVID-19 on the education sector in Nepal: Challenges and Coping Strategies. The study was based on published documents, reports, news commentaries etc. The article concludes that the COVID-19 pandemic has created serious problems in Nepalese education systems. Furthermore, the study shows though Nepal has formulated policies related to integration of technologies since 2000 in education, there is faulty implementation on its strategies and inability to implement the policies. As a result, the challenges and issues associated with integration of technology in education during COVID-19 pandemic have been found Nepal.

Gautam &Gautam (2020) conducted exploratory research on transition to online higher education during COVID-19. The study was contextualized on developing country of south Asia-Nepal. They had applied the blended method of qualitative and quantitative procedures. The study showed technological support, infrastructure availability, faculty and students' perception have a significant relationship for the effectiveness of the online mode of teaching learning processes.

The Research Context

As it is clearly stated above i.e. in introduction section, despite of various issues and challenges, the community campuses of Nepal have already entered to the technology integrated instruction. NPCA has responded to each step taken in response to the COVID-19 pandemic conducting several sorts of online meetings, seminars etc through different software like MS- Team, Google Meet, Zoom etc. to foster and resume the classes under its membership campuses. Even today, it has been mobilizing all sectors to erase the thorns of obstacles and challenges of instruction.

While lunching technology integrated instruction at the public campuses of Nepal, students' and teachers' voices and experiences have to be taken into consideration. To do this, the respective campus bodies have to analyze the circumstances very effortlessly and intensively. If problems are identified on students' and teachers' sides, the necessary solutions or strategies have to be adopted instantly. By doing so, their voices and experiences are unavoidable and these voices and experiences play crucial role to modify the mode of instruction if necessary. Additionally, regarding the integration of technology during the COVID-19 pandemic at the public campuses of Nepal, there are numerous voices, complaints and experiences from the both teachers' and students' sides. Thus, this paper attempts to incorporate their voices and experiences.

III.   METHODOLOGY

The study adopted purposeful sampling procedures to fix the teachers and students as the participants of the study from different public campuses of Nepal. The public campuses, here, included Chautara Multiple Campus, Sindhupalchok, Saptagandaki Multiple Campus, Chitwan, Janamaitri Multiple Campus, Kathmandu, Kailali Multiple Campus, Kailali, Babai Multiple Campus, Bardiya, and Bageshwori Multiple Campus, Banke. Altogether, there were six groups of students and teachers. The students' groups consisted of 6 students in each group who were studying in bachelors' and masters' levels and the groups were assigned group codes as I, II & III respectively. Similarly, A, B and C groups belonged to teachers' groups' codes. The each group of teachers included 3 to 4 participants.

Analyzing the pandemic of COVID-19 circumstance, the researcher had collected the experiences and voices of teachers and students teaching through telephone call, sending e-mails and video chats. The groups were much aware of purpose of the discussion. The discussion data were stored safely on audio, video and graphic forms. Similarly, the researcher transcribed the data into English as they had expressed their experiences and voices in Nepali.

IV.   RESULT AND DISCUSSION

Regarding the integration of technologies during the COVID-19 pandemic at the public campuses of Nepal, the researcher found mixed results. Specifically, most of the teachers had positive voices and experiences on the technology integrated instruction while there were mixed experiences and voices from students' sides. The teachers' voices and experiences at overall, expressed technology blended instruction in classrooms was the dire need of the 21st century and the COVID-19 pandemic had provided an opportunity to implement it in the public campuses of Nepal. Most importantly, technology integrated instruction had been successes to develop the sense of learner autonomy among students of public campuses. Similarly, the students had opined though technology integrated instruction was fruitful among the students, numerous challenges and issues were privileged. Some of the experiences were found to be positive. The positive experiences here mean the students had positive attitudes towards technology integrated instruction during the COVID-19 pandemic. Some of the views of teachers and students, as the examples, are given below:

A participant from group 'I'
Integration of technology at campus during COVID -19 is not totally satisfactory. There is lack of internet accessibility to the entire students. Thus, the concerned authorities have to resolve this kind problem instantly.

A participant from the above mentioned group
Technology integrated instruction during the pandemic has increased interests and involvement among us. We are encouraged and motivated to achieve better outcomes.

A participant from group 'II'
Most of us are unaware about technologies used in the classrooms. Thus, if we were provided training or coaching to operate them, the technology based instructions would be better.

A participant from the same group
In my opinion, technology based instruction during this pandemic has made most the students lazy and in the name of online classes most of us are busy on many social sites like facebook, youtube etc. Therefore, technology based instruction, in my opinion, is no more than making us lazy.

A participant from group 'III'
Technology based instruction like online classes have been running at our campus smoothly. This mode of instruction has provided an opportunity to continue our classes staying at home. Thus, this kind of instruction should not be interrupted even after the pandemic for master degree levels.

A participant from the same group
Integration of technology during the COVID-19 pandemic has both pros and cons aspects. On one hand, it has led us to the digital world and this is the demand of contemporary society as well. On the other hand, lack of preparedness and no sufficient infrastructure are the major issues. Thus, participation of our friends on online classes is decreasing day by day.

Similarly, teachers of different community campuses of Nepal also had different experiences and voices regarding technology integrated instruction. Most of them had put forwarded their positive voices and experiences on such mode of instruction during the pandemic. Some of their experiences and voices as examples are mentioned below:

A participant from group 'A'
Technology integrated instruction like online classes through Microsoft Team at Chautara Multiple Campus has significant impact to present lesson more effectively. As being the principal of this campus, I am truly satisfied with technology based instruction and all of the faculty members of this campus are rejoicing this mode of instruction during the pandemic.

A participant from the same group
Technology based instruction at Kailali Multiple Campus, has been running very smoothly. Technology integrated instruction at this pandemic period has developed sense of learner autonomy. We have adopted Microsoft Team and Zoom applications to engage the students.

A participant from group 'B'
We have been using Microsoft Team and Zoom applications to run the classes for both bachelors and masters levels. Though direct classes are going to be resumed soon following the protocols of university at Saptagandaki Multiple Campus, technology integrated instruction has played remarkable role to foster the contemporary education system.

A participant from the same group
We were unable to run the direct classes during the COVID-19 pandemic as Kathmandu valley is the hotspot of COVID-19. Thus, realizing this circumstance Janamaitri Multiple Campus lunched online classes through Microsoft Team and Zoom app. The consequences of online classes were really impressive among the students. It is realized that online classes have crucial role to show the digital world among our students and staffs.

A participant from group 'C'

Despite of some challenges, technology based instruction at Babai Multiple Campus is going nicely. Managing Internet accessibility to all the students and some staffs has been little problematic. Apart from this problem, online mode of instruction is very much appreciated by all the stakeholders here.

A participant from the same group

Though there is low participation of students on technology based instruction during the COVID-19 pandemic, technology integrated instruction at Bageshowri Multiple Campus has played important role for the overall development of students.

V. DISCUSSION

The above mentioned voices and experiences from students and teachers studying and teaching at different public campuses of Nepal during the COVID-19 pandemic clearly hint us that most of students had mixed views and experiences towards technology integrated instruction. That is, some of students had positive experiences towards technology based instruction as well as some of them raised the issues like accessibility of internet, spending their valuable time on different social networks only, lack of well-managed infrastructure, problem to assimilate the technology based instruction and so on.

The teachers' voices and experiences regarding technology integrated instruction during the COVID pandemic revealed that almost all the teachers had positive experiences. They perceived technology based instruction as the demand of contemporary miraculous world. In addition, technology integrated instruction at public campuses of Nepal was the sword against the COVID- 19 pandemic.

VI. CONCLUSION

Technology, in the present era, has brought revolutionary changes in many aspects of human beings and educational sector is no exception. The COVID-19 pandemic has compelled all the public campuses of Nepal to follow technology based instruction. At present, integration of technology here, (i.e. at public campuses of Nepal) has reached to its climax position. Despite of various issues, the campuses have been adopting technology integrated instruction. Similarly, the voices and queries fingered by both students and teachers have to be solved instantly to stop students' deprivation from such mode of instruction.

The study, no doubt, will be fruitful to those who are willing to carry out further research related to the study and the teachers, students teaching and studying at various public campuses of Nepal as well as the policy makers will equally be benefited.

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