

Use of Ict in Teaching-Learning Activities in Model Community Schools of Vyas Municipality: An Interpretive Study

Bimal Sigdel

Asst. Professor, Aadikavi Bhanubhakta Campus

Abstract

This interpretive study delves into the utilization of Information and Communication Technology (ICT) in two community model schools within Vyas Municipality. Findings reveal these schools receive government grants annually, ensuring financial stability, particularly in the ICT domain. While not all teachers are ICT-savvy, they actively seek improvement through peer collaboration and regular ICT training. Digitally illiterate teachers exhibit significant progress in handling ICT devices. Notably, most teachers conduct ICT-based classes, either in-person or online. However, several challenges emerge, including the need for teacher training, power interruptions, and financial difficulties for low-income students. This research emphasizes the growing role of ICT in teaching and learning. It underscores the motivating impact of ICT use on the students and teachers.

Keywords: ICT, Community Schools, Online classes, Teacher Training, Technology Integration

INTRODUCTION

This chapter deals with the scene-setting regarding the concerned topic, and the background of the study, and it also states the statement of the problem of this research. Besides, the rationale of the study, the purpose of the study, research questions, and delimitations of the study will be in sequential order.

Education is the leading process of facilitating learning to the learner and positively changing knowledge, morals, beliefs, skills, values, and habits. It is a process of acquiring new habits, knowledge & skills that enable learners to perform differently and skillfully. It is a mental activity through which skills, attitudes, appreciation, and ideas are acquired, resulting in the modification of behaviors (Lamichhane, 2018). In other words, it is the process of development of all those capabilities in which an individual enables him/her to control the environment and fulfill his possibilities.

Scene Setting

Over the past two decades, I have experienced many changes in my teaching career. When I talk about change, the scene of myself studying at the primary level comes to my mind. When we were in primary school, we used to sit on the floor and read in groups. Whiteboards, Markers, Computers, Smartboards, etc. weren't there then. We played, studied, and grew up reading from the dust. I was also facing some problems at the beginning of my teaching career. But times are changing. In the meantime, many new dimensions have been added to the educational work. Nowadays, information and

communication are easily accessible to people. Students are more eager to learn using information technology tools than they do in the natural environment.

Because of easy access to information and technology, most students and teachers today prefer to learn and teach with information and technology. Information and technology are also being used in teaching-learning activities. Twenty years ago, my teaching style was also traditional. I and my students also prefer a modern teaching style based on information technology over a traditional teaching style. I have noticed that students have developed self-discovery skills to solve any problem while teaching by using ICT-based equipment. Educational Institutions Even in such a risky situation, there was no alternative to teaching online mode by the use of ICT.

Many efforts are being made by the government to enhance the computer skills of the teachers working in community schools. The Educational Training Center has been imparting various ICT-based training to the teachers. In addition, the government has been designating certain schools as model schools at the national level and providing large sums of money annually for educational and physical activities. Nepal government has set various requisites for any community school to be declared as a model school as eighty percent and above pass out result of SEE of the last three years, the school's sufficient land, a minimum of one thousand students, etc. People are blaming that community school teachers are lagging in technology as they cannot use technology. In this context, I have decided to conduct this research to find out the state of the use of ICT in teaching-learning activities of community schools of Vyas Municipality.

Background of the Study

Information Communication Technology (ICT) addition refers to the use of ICT to improve the teaching-learning procedure. It is used to involve learners in significant learning that interprets into student's better performance. Real ICT integration must focus on pedagogic design which takes into account the fact that teachers need to acquire technology in the setting of their areas of concentration (Mishra, 2020). To improve the efficiency of online education in Nepal, stakeholders must focus more on upgrading infrastructures, training teachers, and inspiring students (Khatai & Bhatta, 2020). ICT plays a vigorous role in the growth of any nation. With the overview of computers, the predecessor of our modern-day ICT, and the gifted potentials of computer-based teaching and learning, many researchers and finance agencies were led to invest much of their capital to explore the opportunity of computers substituting teachers in key instructional roles (Eng, n.d.). The use of ICT generates a commanding learning setting and it transforms the teaching-learning process in which students deal with knowledge in an energetic, self-directed, and productive way (Volman & Eck, 2001).

Even though online education is supposed to have less social interaction, missing social presence, and synchronicity in communication, online learning has some advantages for students (Bali & Liu, 2018). Information communication technologies (ICT) at current are manipulating every aspect of human life. They are playing noticeable roles in workstations, business, education, and entertainment. Moreover, many people identify ICTs as catalysts for change; change in working circumstances, handling and exchanging information, teaching approaches, learning methods, scientific research, and retrieving information communication technologies (Ratheeswari, 2018).

Although several studies suggest that online education and blended instruction (a "blend" of online and traditional approaches) can be as effective as traditional classroom models, few studies have focused on learner satisfaction with online instruction, particularly in the transition to online learning from

traditional approaches (Smart & Cappel, 2006). Covid-19 led to schools and universities ending in-person teaching. The online education that emerged after COVID-19, has been challenging in Nepal because students, teachers, and administrators were not prepared for it (Khatai & Bhatta, 2020).

Global advancement in ICT also impacted the education sector worldwide including Nepal. Due to the advancement in ICT, the entire method and process of teaching-learning are being changed regardless of the level of compatibility of the teachers and students with the advancing technology. Apart from that, the current pandemic situation has also increased the demand side of ICT in the education system. The use of ICT in education helps to reduce the cost of transportation, saves time, and increases access to education at all levels. Across the world, several universities initiated an online mode of teaching-learning long before the COVID-19 pandemic whereas few realized the need after the pandemic. However, in a country like Nepal, where only a limited proportion of the population is exposed to ICT devices and software used in education, it is important to get information on teachers' and student's compatibilities in using ICT. This research attempts to examine the effectiveness of ICT in the classroom.

The use of technological applications in the classroom is being increased globally and in Nepal. During the COVID-19 pandemic, most educational institutions in Nepal started online classes for their students. The efficacy of online classes is still under consideration due to several reasons such as affordability, compatibility, and so on. In Nepal, there is a large proportion of guardians and students in favor of online classes whereas another portion is not feeling comfortable. There are supportive arguments towards online classes saying that it is the time-saving, cost-saving, and enhancement of modern approach whereas other arguments say that online classes are becoming tenuous to the parents. Parents with low economic strata cannot afford devices and thus are in isolation which resulted in creating a gap between haves and have-nots.

To clarify the varying arguments regarding the use of ICT in the classroom, research exploring these areas and suggesting further investigations will help the further advance of the education sector using ICT in Nepal. With the increasing use of online classes in almost every educational institution, knowing both teacher's and students' perceptions of affordability compatibility and acceptability are important areas to dig out. If students do not have a positive attitude towards the use of ICT in the classroom, the learning of students is impacted greatly therefore the effectiveness of the online classes cannot be advocated.

Due to technological advancement, students of school level are becoming more techno-friendly. Nowadays even one graded child can run several apps and can enhance their learning with enjoyment. In this 21st century, student's cognitive development is digitally supported and is growing accordingly. To catch up with such potential of the students, it was essential to carry out diagnostic research which helps to identify the students' perceptions towards the use of ICT in the classroom. This research report aimed to examine the effectiveness of the use of ICT in community schools of Vyas Municipality.

Statement of the Problem

Teaching-learning activities in schools are to be converted to squeeze ICT skills suitable for the twenty-first century. Despite its importance and strategies developed by the government to implement ICT in schools, research conducted in many schools has established that most of them are not effectively adopting and using ICT to support learning, teaching, and management as intended (Ratheeswari, 2018).

Studies have exposed that Information and Communication Technology (ICT) improves universal access to education, efficiency, equity, and quality in education. It is not clear what specific factors impede

its efficient integration in public secondary schools. If the factors manipulating ICT integration in the Community secondary are not recognized and addressed, opportunities that would have then been accessible for teachers and youngsters will be lost (Mynaříková & Novotný, 2020).

Nowadays students have more technical knowledge and they are coaching their parents at home on using ICT devices (Mynaříková & Novotný, 2021). On the contrary, most of the community school teachers are digitally illiterate, have low motivation to use ICT, face compatibility issues, not willing to embrace the challenge compared to the institutional schools' current era is regarded as the digitalization era hence the use of ICT in the classroom is being mandatory. However, due to the lack of budget and technical skills, the use of ICT in a community school is not becoming effective as expected. In line with this discussion, this research tries to explore the effectiveness of ICT in the community school of Vyas Municipality. Besides, this research aims to explore student's perceptions of the use of ICT in the classroom.

Several researchers have been carried out to examine the attitude of the teachers towards the use of ICT in the classroom but very few research are available exploring community schools' students' attitudes towards the use of ICT in the classroom. Therefore, the researcher was prompted to establish community school' students' attitudes towards the use of ICT in teaching-learning activities in model community secondary schools of Vyas municipality.

This study especially deals with some issues. Mainly this research focuses on the issue of whether the students of community schools of Vyas Municipality are comfortable with the use of ICT in the classroom. Whether students of community schools enjoy the well-equipped ICT classroom or not was another area of exploration of this research. Besides, this research is devoted to digging out the students' choice among the ICT-based classroom and non-ICT-based classroom. The effectiveness of the ICT in the classroom of community schools can also be observed by this research though this research study is carried out in the community schools of Vyas Municipality.

In Nepal, most community schools do not assess the effectiveness of the use of ICT in the classroom. The major reason is that the government schools of Nepal are suffering from a deficiency of skilled, trained, and qualified teachers. Some of the time government donates to purchase ICT-based equipment and to establish the computer lab. Some of the community schools are trying to conduct the ICT-based classroom. Regarding this, this research searches the level of perception of students towards the use of ICT in their classroom (Makura, 2014).

The rationale of the Study

The significant beneficiaries of the study are the teachers and students of the concerned community schools. This study will help school stakeholders i.e. parents and school management committee to address and revise their policy regarding the mode of teaching-learning activities. It may help teachers to become more conscious of ICT and determine new and progressive ways to make the classroom more participative and collaborative. Students and parents would be more accountable for their responsibilities. It may also assist leaders in exploring new innovative ways of teaching-learning activities to make the online class more fruitful.

The teachers may nurture a constructive attitude towards ICT in schools and the long route apply it competently in the teaching-learning procedure. For the students, it would be more beneficial as their teaching and learning modes could be changed as per the suggestions given by the study. Other

beneficiaries will comprise the scholars, schools, community, and administration as a whole. The findings of the study will contribute to other researchers in other universities as they further their research.

Purpose of the Study

The purpose of this study was to discover the usage of ICT in teaching-learning activities by scholars and educators in model schools of Vyas Municipality.

Research Questions:

- How do students and teachers use ICT in the classroom?
- What are the challenges and opportunities of using ICTs for teaching and learning?

Delimitation of the Study

This study mainly focused on the pedagogical use of ICT such as the use of ICT in lecture delivery, use for motivation, use for communication, assessment, use of ICT for the preparation of teaching materials

LITERATURE REVIEW

This chapter mainly focuses on conceptual review i.e. thematic review, empirical review, study of related theories and policies regarding the use of ICT in Nepal and especially in the community schools of Nepal. Further, this chapter identifies the research gap as well. The use of ICT is increasing dramatically during this 21st century. Several types of research have been carried out in the field of the use of ICT. To analyze the findings and establish theories of previous research the part of the literature review is mainly discussed below:

Information Communication Technology (ICT) addition refers to the use of ICT to improve the teaching and learning procedure. It is used to participate learners in meaningful learning that interprets into better student performance. Effective ICT integration should focus on pedagogy design which takes into account the fact that teachers need to learn about technology in the context of their areas of specialization. Information and Communication Technology (ICT) plays a strenuous role in making teaching and learning activities more meaningful. It is one of the most efficient tools for advancing knowledge and skills. It is necessary for quality education in government schools in Nepal. Problems such as a lack of resources (viz. qualified teachers, hardware, software, electricity, etc.) and poor project implementation strategies militate against these efforts (Dhital, 2018).

The exercise of information and communication technologies (ICT) in education does not conclusively establish important effects on learning. However, not all ICT practice models are measured to affect student consequences. Therefore, to study precisely the influence of ICT, the notion of an educational program strengthened by ICT necessity first be well-defined.

(Basri et al., 2018) mentions that "a large number of students lack IT gadgets like smartphones and laptops. The reason is both the cost of gadgets and internet accessibility. The public servers, besides the high cost, are very slow which makes it difficult to utilize ICT platforms regularly." Education is the process of a major change, where through innovations in technology and teaching methodology, academic institutions are being allowed to work for the benefit of the student. Information and Communication Technology (ICT) can enhance universal access to education, equity, quality, and efficiency in education (Sangani, 2013).

When used appropriately, ICT can help to reinforce the importance of education to a progressively networked society, raising the quality of education by making learning and teaching an active process connected to real life. ICT nowadays is becoming part of our lives. ICT is now broadly used in the educational world. Teachers, students, administrators, and every person related to education are popularly used in ICT. Teachers use ICT to make the teaching-learning process easy and interesting. A competent teacher has several skills and techniques for providing successful teaching. So development and increase of skills and competencies of teachers require knowledge of ICT and Science and technology (Bhattacharjee & Deb, 2016).

A cognitive content approach towards the study of data and Communication Technologies (ICT) in education rejects the read that ICT may be studied in isolation; it should be studied inside the broader context during which it's placed. The paper argues for an additional holistic approach to finding out about ICT in colleges by adopting a cognitive content perspective. It proposes a theoretical framework supported by activity theory, with the activity system as a unit of study that's encircled by completely different levels of ecological circles (Lim, 2002).

At the international level, policy for integrating ICT for development was first formulated in the Millennium Development Goals (MDGs), which states that “in cooperation with the private sector, make available the benefits of new technologies, especially information and communications” (United Nations, 2000; 2012). Moreover, while not mentioned explicitly in the Education for All goals, it is arguable that ICT plays a pivotal role in achieving these goals, including broadening access, eliminating exclusion, and improving quality (UNESCO, 2000).

The ICT policy of Nepal 2015 aims that by 2020 the Place of Nepal would be in the top second quartile in Network Readiness and EGDI. 75% of the population will be digitally literate and 90% population will have broadband access. The Contribution of the ICT sector (except telecom) to GDP will cross 2.5% and every Nepalese will have internet access. Besides, 80 % of govt. services will be online and all the government-owned broadcasting services will be transformed to digital technology by 2017.

Research Gap

The previous research studies showed that several pieces of research are carried out concerning the use of ICT in classrooms. Different types of research have been carried out concerning the university classes or classes of institutional schools. To date, research related to the use of ICT in classrooms in the model, community schools has not been carried out. So this research would be successful in covering the research gap as this study is mainly based on the use of ICT in classrooms in the model community school.

RESEARCH METHODOLOGY

This research deals with the philosophical foundation of the research, research design, selection procedure of the informants of the study, and background of the field and the informants. According to Creswell (2009), qualitative research is a means for exploring and understanding the meaning individuals or groups attribute to a social or human problem. The research method adopted here is, therefore, qualitative since my research purpose is to explore the existing condition of the use of ICT in community schools of Vyas Municipality. In this research, the purpose is to explore the stakeholders' (i.e. Students and teachers') perception of the use of ICT in classrooms in community schools.

Research Design

According to Creswell (2009), qualitative research is a means for exploring and understanding the sense of individuals or groups' quality to a societal or human problem. The research method implemented here is, therefore, qualitative since in this study I will be working with text which means transcribing the text, building meaning, and ascertaining major ideas through coding, classifying similar codes, and generating the different themes for discussion. This study is an Interpretive investigation as it is grounded on the assumption that social reality is not remarkable or objective, but is somewhat shaped by human bits of knowledge and social circumstances, and is, consequently, best studied inside its socio-historic background by integrating the particular understandings of its several informants. Because interpretive researchers view social realism as being deep-rooted within and unbearable to abstract from their community settings, they "interpret" the truth through a "sense-making" procedure rather than a hypothesis testing procedure.

Research Field

There are only two community schools in Vyas Municipality that were declared as model community schools by the government of Nepal. So these two model community schools of Vyas Municipality were selected as the research field of my study.

Population and Sampling

All the teachers and students of the two model community schools were the population of my study. However, I had taken one teacher and two students including a boy and a girl from each school.

Informants of My Study

Teachers and students of two community model schools of Vyas Municipality Tanahun were the informants of this research. To make the selection process purposive and impartial the teachers, students were selected as one ICT teacher and one non-ICT teacher from two different community model schools and four students i.e. one girl and boy from grade IX and X respectively from one community model school and another boy and girl from grade IX and X of another community model school were the informants of my study. To collect the data from the informants, the researcher visited the informants and requested to answer the questions that were set as per the research guide. The questionnaires were sufficient to assess the existing level of use of ICT in classrooms in community schools. It was kept always in consideration that the informants could answer freely from their logic. Opinions collected from the informants were preserved safely.

Source of Data, Tools, and Process

My research seeks to understand, represent, and explore the perceptions or attitudes of students and teachers towards the use of ICT in the classroom in the model community school. So this research mainly followed the qualitative interpretive design. Students' and teachers' perceptions and attitudes toward the use of ICT were inspected by a total of six informants including teachers and students. Informants were selected who could best information to the research questions. The research informants were from different categories i.e. from different grades, schools, and sex.

Background of Field and Informants

As per the plan, I have selected two model community schools: one community (S_1) and another school (S_2). I have interviewed two teachers from each community school which are (T_1) & (T_2) respectively. Among the schools, S_1 is located in Vyas Municipality-1, Vadgaun, Tanahun. This school was established in 2025 BS and it is rich in physical infrastructure. The school has forty-five teachers staff and about one thousand students. The respondent teacher of this school (T_1) has completed a master's in ICT and currently pursuing an MPhil in ICT. He is a lecturer in one community college of Damauli and is regarded as a top trainer of the computer. He is 35 years old, and he has 14 years of experience in the teaching field. One female student of this school (S_{11}) is from grade IX and represents a lower-income group family and she does not the availability of ICT devices at her home. Another boy student of this school (S_{12}) is from grade X and represents the higher income group family and he has the availability of ICT devices whatever he requires for his study purpose.

S_2 is located in Vyas Municipality-2, Damauli, Tanahun. This school was established in 2037 BS and it is regarded as the top community school in the country. The school has ninety-five teachers and staff and nearly twenty-eight hundred students. The respondent teacher from this school (T_2) has completed a master's in sociology. He is 42 years old and has been teaching social and other subjects from grade IX to XII for the last 17 years. One boy student of this school (S_{21}) is from grade IX and represents the higher income group family and he has the availability of ICT devices whatever he requires for his study purpose. The female student of this school (S_{22}) is from grade X and represents a lower-income group family and she does not the availability of ICT devices at her home.

Approaches of Data Analysis or Interpretation

The data collected from the informants are presented in reliable pie charts, figures, histograms, bar diagrams, etc. so that it makes it easy to analyze and interpret the data. Since the study is based on theoretical aspects, none of the mathematical tools are used to analyze and interpret the responses. The conclusion of the study is drawn based on the opinions of the informants. Since this research is interpretive in design, the key quality standard used is trustworthiness and authenticity.

Ethical Guidelines

Ethics, in general, is a moral principle that governs a person's behavior. So, regarding ethical considerations, the responses were collected in a very friendly manner making sure that the researcher has not overtly allowed personal values or theoretical inclinations to affect the research procedure and findings. Prior consent of the informants regarding the questionnaire was taken so that the informants could answer the questionnaire freely without feeling any kind of pressure. The informants were reminded not to write their names or the names of their schools on the questionnaires to ensure anonymity.

TEXT INTERPRETATION AND MEANING-MAKING

This chapter portrays the brief introduction of the two model community schools and the introduction of the research informants. I present the responses that I got at the time of discussion and in-depth interviews with informants. While doing so, I critically analyze and interpret their experiences thereby including my critical self-reflection together with the various literature. The central focus of the in-depth interview was to capture the experiences of teachers and students regarding the use of ICT in

teaching-learning activities. Six informants in my research were school teachers and students from two model community schools of Vyas municipality.

With the help of research guidelines, I interviewed informants to explore the existing condition of the usage of ICT in model community schools. Besides, I tried to explore the opportunities and threats that the students and teachers face during their ICT-based teaching-learning activities. By being involved in several phases of the interview, I tried to explore their views, perspectives, and experiences by going deeper into their practices and thought processes.

Discussion on the Informants' Responses

During the time of closed discussion as per my interview guidelines, the selected teachers and students forward their feelings, and experiences regarding the use of ICT in teaching-learning activities. The narratives obtained from the informants were recorded as below:

S₁₁ interpreted that, "I belong to a below-average family background. My family income is less so I am suffering from financial deficiency and I cannot afford ICT equipment. But still, I am grateful to the school management who has provided me a scholarship."

Yeah, I am fond of using ICT in the classroom or at home while studying because ICT makes learning easier, I try to do my level best to use ICT in the learning process. Some of the teachers do not have proper knowledge about ICT. (S₁₂ Interview)

"Several types of ICTs are being used in my school and my teachers use ICTs in different ways to teach us. They show even videos related to content in the classroom. it depends on subject and knowledge, the School has been arranging online classes during a pandemic, and I enjoy using ICTs on my own because I have ICT devices available at home." (S₂₁ Interview)

"The development of ICT in the 21st century has benefited me a lot, I do support ICT because it is convenient in the education section. In the school, at the class where I study, our teachers are using ICT media to teach us different subjects." (S₂₂ Interview)

"I use different apps like Geo Zebra for mathematics, YouTube, Mentimeter, and Quizzes. There are some problems like insufficiency of ICT devices and even some of our schools' are very weak in ICT and do not have access to ICT at their home. So the use of ICT cannot be expected in those schools due to the lack of equipment." (T₁ Interview)

"I have been teaching social studies for seventeen years but we need to change the technique of teaching accordingly and this is a unique way of teaching through ICT. I have been using ICT in my subject whether it is physical or online classes. I use ICT extensively. The school provided training related to online classes and the use of ICT to encourage the teaching staff. The school makes such arrangements from time to time." (T₂ Interview)

Prevailing Condition of Use of ICT

The research was conducted to illustrate the state of ICT use in two major community schools in Vyas Municipality. Both schools were model community schools. These community schools receive a large grant from the government annually. Both the schools were found rich in computer labs, smartboards, and other ICT-related materials as they were in sufficient quantity. The schools had the routine to take the students of each class to the computer class at least once a day.

The above discussion showed that the use of ICT was far behind the financially weaker students but it was found that the financially able students used ICT at their homes as well. Teachers and students

are trying their best for the optimum utilization of ICT in their teaching-learning activities. However, students from low-income group families are still facing problems in ICT-based teaching-learning activities. During the COVID-19 pandemic, the schools were conducting online classes, and low attendance of students was noticed in the online classes, many teachers in the school did not know how to conduct ICT-friendly online classes effectively due to a lack of ICT knowledge. The school has developed a culture where teachers who are knowledgeable in technology are helping the teachers who are lagging in technology (Muthuprasad et al., 2021). This is the reason why they enjoy ICT-friendly classes more. That is why the teachers are also very fond of conducting ICT-friendly classes. During the discussion, the teacher of S₁ also told us that all the teachers were distributed 1/1 laptops free of cost from the school's side, which led to high morale among the teachers towards ICT use. The school encouraged teachers to use a variety of educational apps. He also told us that their schools are coaching their teachers to prepare digital educational materials as they are very influential in teaching and learning.

The students of both schools had similar views on the use of ICT in the school in the sense that the economically strong students were exploring and studying new topics using ICT-related equipment at home and also in their school ICT-friendly class. In contrast, financially weak students have not been able to use ICT devices at home and have not been able to acquire ICT-related knowledge at home, which has made it more difficult for them to reach ICT classes at the same time than other students at school. The students expressed their gratitude for teaching the study and said that the school would be more interested in the promotion of ICT in the future.

The challenges faced by the informants regarding the use of ICT in teaching-learning activities were recorded below:

"Due to my economic condition I am enabling to enjoy ICT; on the other hand, our school also has poor progress in ICT management." (S₁₁ Interview)

S₁₂ said that we do not have enough ICT equipment in our school and whatever is here is not appropriate.

"All friends cannot attend the online class due to lack of devices, since devices are expensive and parents cannot afford. I feel that online classes are not effective." (S₂₁ Interview)

"I have enough ICT-related equipment at home and I explore subjects through Google, YouTube, and other apps top, when I feel so. I must tell you that it is effective rather than traditional physical classes. Electricity is a big problem, apart from the internet not being accessible everywhere easily, ambiguity in voice, and limited knowledge of ICT among many teachers. It might be exceptional but the truth is bitter what I experienced." (S₂₂ Interview)

"The students are suffering due to poor financial conditions. They are not in a status to buy and afford an internet connection. "How can they be entertained by ICT now?", "Varieties of the supportive program should be conducted to increase the interest of students in ICT use." (T₁ Interview)

"ICT-based classes would be better if there would be a smartboard with proper internet in each classroom. Teaching can be sustainable with the use of ICT. Overall ICT-based classes are more appropriate than the traditional way of classes." (T₂ Interview)

Major Current Challenges of Using ICT

The ICT-based classes at the school showed the students who had ICT devices at their home were smart, but sadly the financially weak students could neither use the ICT devices at their home and due to this reason they were feeling discomfort in ICT classes in their schools. During the intensive interview,

the teachers and students of the school said that they are facing various problems while conducting or participating in ICT-based classes, especially in the absence of adequate knowledge about ICT use. Based on the fact that teachers who are not proficient in ICT, their classes were not found to be effective. Teachers in such classes were found to be neglected by the students. Lack of adequate availability of ICT-related materials is the main challenge of ICT classes to use ICT simply and easily (Jha, 2020). This paper deals with the role of Information and Communication Technology (ICT) in higher education institutions in terms of the capability enhancement of learners. In addition, this research paper intends to focus on online and distance education related to higher education institutions in Nepal. Particularly, the relationship between ICT with capability enhancement, the relation between ICT and ODL mode of higher education learners, and the relation between ICT and capability with student learning have been explored in this paper.

Besides, contributing to quality human life, ICT is found to help promote good behavior and attitudes, increasing their ability to be, do, and function. Integrating technology in education can help change people's lives. Students and teachers need to have ICT equipment so it seems factual that ICT classes are not effective due to lack of equipment during the discussion. There were various other problems in ICT classrooms. According to the teachers, the lack of regular power supply has directly affected the ICT classrooms. In addition, the online ICT classes have not been as effective as expected due to students turning on their videos during online classes. Teachers and students said that the physical infrastructure of the classroom was not in line with the use of ICT equipment so they are not using ICT devices in the classroom so students go to the smart hall for their ICT-based classes. To make ICT-friendly classes financial resources became the biggest hurdle to conducting ICT classes as there is a huge price to pay for purchasing ICT equipment.

Regarding the opportunities and advantages of the use of ICT in teaching-learning activities, the students and teachers responded differently as below:

S₁₁, interpreted, "I'm interested enough in ICT but my poor financial status does not allow me to go with it. Now I understand that financial status can be a hurdle in grooming ICT."

"Education can be better with the help of ICT, whenever I get a chance I use YouTube, and Google and explore myself to learn new things. ICT can only be fruitful when there is proper management." (S₁₂ Interview)

"I have been using YouTube for study purposes. I don't like to take regular online classes. I do not enjoy the online class conducted by the school at all there were some reasons behind that. Some teachers do not have proper knowledge about the use of ICT." (S₂₁ Interview)

"Physical classes are non-live classes without ICT & she further mentioned that she has a bit different perspective about ICT technology while having subjects like math & and science. It is not effective while having maths and other Nepali subjects because I feel that those subjects are difficult to understand using ICT. Though there is some good part of ICTs; something which I dislike is the frequent change in apps and tools. Our school supports a lot using ICT but online classes are to be modified and a lot remains to make it effective in schools." (S₂₂ Interview)

I highly support the use of ICT because it has positive impacts on the teaching-learning process. The current state of ICT use in my school can be further refined." (T₁ Interview)

Though the schools remain closed; he used to teach students online. I am not a computer teacher but I have learned so many things while using ICT and an additional skill has been developed. I am no weaker than any other computer teacher. Our school is using ICT for not only conducting classes but

also taking examinations via online mode, holding companions for various talents, and conducting quizzes online. Our school motivates students as well as teachers to use ICT to the required extent." (T₁ Interview)

Opportunities for ICT-Based Classes

In-depth discussions between teachers and students have shown that ICT-based teaching and learning activities contribute to the holistic development of students. The knowledge of ICT supports the teachers in preparing the digital teaching-learning materials. During the intensive interview, the teachers and students said that through the creation of ICT and online, schools have virtually completed a variety of extracurricular activities competitively. Realizing that it would be appropriate, various educational apps and various other online mediums have also enlivened the use of ICT, especially in topics such as social, population, etc. Research has also shown that ICT tools are a boon for studying the geographical conditions of our country and abroad (ITU, 2019). Teachers and students can develop their skills to identify and solve their problems if they are proficient in using ICT.

The teachers and students said that the use of ICT-based equipment and ICT-friendly classrooms have helped the students to be aware of new issues and developments in the country and abroad. According to the discussion, all the teachers and students are more interested in ICT-friendly classes than traditional classes. Further, the capacity of the teachers has been enhanced by imparting ICT-related training by the schools to the teachers from time to time. He also said that a separate hall has been set up in the school where students can take turns to conduct ICT-friendly classes.

INSIGHTS, CONCLUSION, AND IMPLICATIONS

As per the research design after having the intensive interview with students and teachers I have detailed the insight and learning, implications, and conclusion of this research.

Insights from the study

The purpose of this study was to explore the use of ICT in the model community school of Vyas Municipality and it was an interpretive study. After analyzing the experiences of my informants and tapping my perspectives, I have come up with the following insights. Both the community model schools are getting government grants annually. For this reason schools do not have any type of financial deficiency to fulfill their objectives, especially in the ICT sector. Both the community schools are trying their best to explore more and are ready to learn new developments in ICT. Though all the teachers are not ICT-friendly, they are trying to improve their skills with the help of their colleagues. Teachers' training in ICT conducted by the schools periodically is the major milestone in enhancing the ICT-based classroom activities. Digitally illiterate teachers are also growing their skills dramatically in the handling of ICT devices. Nowadays most of the teachers of these two community schools can run their ICT-based classes either physically or via online mode.

Several obstacles have been noticed that the schools, teachers, and students face during the time of ICT-based teaching-learning activities. As the schools are trying for the best use of ICT, they still the schools need to conduct training to teach the teachers about the handling procedure of ICT devices. Besides, frequent power cuts also adversely at the time of conducting ICT-based teaching-learning activities. Financial crises are becoming a major challenge to students who are representing low-income group families. As this research is carried out at the climax of the second variant of Covid-19, teachers,

and students are connecting in their classes via online mode. School record shows that the number of informants in online classes is increasing ultimately boosting the use of ICT in teaching-learning activities.

Conclusions

This research focused mainly on the use of ICT in teaching-learning activities in two model community schools of Vyas Municipality. The intensive interview with the students and teachers helped to assess the existing situation of the use of ICT. Besides, the field visit to the schools' computer labs, ICT hall, and classrooms the researcher helped to observe the ground reality of the existing use of ICT. It is found that the students and teachers of the concerned schools are trying for the best use of ICT in teaching-learning activities. Financial deficiency and frequent power cuts are the major problems for the effective use of ICT in teaching-learning activities. The attempts made by each school in the field of ICT are appreciable. This research mainly concludes that the use of ICT in teaching-learning activities increases the motivational level of both students and teachers.

Implications

My study mainly focused on the exploration of the use of ICT in model community schools. Teachers and students of these two model community schools of Vyas Municipality are using the ICT as much as they can. The practice of these two schools in the field of ICT would be a role model to other community as well as institutional schools. The devotion of students and teachers toward the use of ICT helps them to dig out their problems and search for the best way of solution from their side. It means there is the development of the concept of identification of their problem and solving the best result. Interest developed in the use of ICT increases the level of motivation among the students and teachers.

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