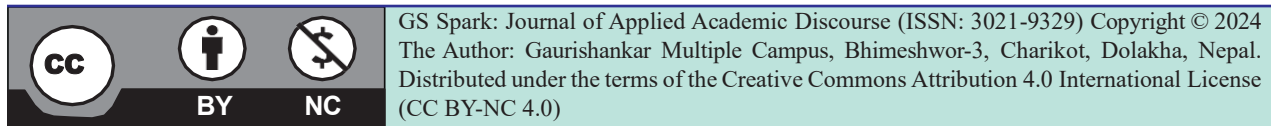




Teachers' Experience of Using ICT in the Community Schools

Bal Krishna Phunyal

Asst. Campus Chief, Gaurishanker Multiple Campus, Charikot, Dolakha



INFO

Corresponding Author

Bal Krishna Phunyal

E-mail

phunyalbalkrishna5@gmail.com

ORCID

<https://orcid.org/0009-0003-8983-0798>

Date of Submission

July 13, 2024

Date of Acceptance

September 25, 2024

ABSTRACT

This article examines the teachers' experiences of using ICT in teaching and learning in a community school in Nepal. Most teaching and learning processes increasingly depend on technology, and this study discusses the theoretical issues of integrating technology into the classroom. To investigate the major challenges and opportunities of using ICT tools and techniques in a community school in Nepal. The data or information is gathered through online and face-to-face moods of a semi-structured interview. The results showed more opportunities than challenges or issues in the ICT-integrated teaching and learning process. It also presents that insufficient information and communication technology (ICT) knowledge and skills, unstable internet services, lack of electrical power, lack of proper administrative support, and other factors directly influence the proper use of ICT-integrated learning in community schools. Moreover, the teachers, students, and other stakeholders have the knowledge and skills of digital literacy. Integrating ICT into teaching and learning activities ensures that they are

more effective and purposeful, making the process both applicable and practical.

Keywords: ICT, digital literacy, education, challenges, opportunities

Introduction

Information and Communication Technology (ICT) is a significant discipline that is vital to the quality of education in rural community schools. Most teachers are less familiar with the concept of ICT and ignore using such devices in their classrooms, which directly affects the quality of education. It is acknowledged that technology in education may change the classroom atmosphere, leading to changes in the learners' expectations. The use of ICTs such as computers, smartphones, television, and other electronic devices in teaching and learning affects the progress of learning outcomes. In the present condition of teaching-learning activities, most teachers prefer a different form of ICT-integrated tools and techniques.

ICTs are motivating because they help learners learn the language carefully designed to meet the prescribed goals (Dahal, 2019; Jayanthi et al., 2016). Most community schools in rural areas of Nepal are still awaiting financial support from the authorities regarding establishing ICT-equipped classrooms to increase students' learning outcomes. Most private schools in urban areas already have different ICT facilities and internet services. Moreover, most teachers and students have access to internet facilities outside the school areas in the urban areas compared to the rural areas. Government schools in rural areas do not have proper infrastructure for the use of ICT in the classroom, such as facilities for electricity, internet, and other ICT equipment (Rana & Rana, 2020). The present condition of the successful implementation of ICT in the educational system in a rural community in Nepal has been received by the Department of Education and its operational bodies and other

non-government organizations, such as community forums (Rana et al., 2020).

Literature Review

Regarding the proper use of ICT in education, the most challenging task of the lack of proper knowledge and skills. The success and failure of teaching and learning activities may depend on teachers' and students' proper use of ICT in the classroom. Information and Communication Technology (ICT) is the digital processing of ideas and information through the use of electronic devices such as computers, television, smartphones, the internet, smart boards, and tablets, which are also technologies that are specially used for collecting, storing, editing, passing and exchanging ideas and information on various forms (Akpabio et al., 2017). Properly using ICT resources may offer teachers and students innovative teaching and learning strategies (Akpabio et al., 2017). Moreover, Nguyen (2021) argues that the experience of teaching and learning activities regarding the use of ICT may demand many skills and changes from the teacher's side, such as the teacher's teaching and learning skills, Professional and pedagogical knowledge, students' readiness and the school environment and the success and failure of using ICT tools in teaching and learning activities may depend on not only the knowledge and skills of the teachers but also the lack of proper knowledge regarding the use of ICT in language teaching and learning to the students.

The proper use of ICT in English Language Teaching classrooms may offer extraordinary changes in the educational system of the country with the basic knowledge and skills of teachers and students in order to integrate and interact with each other to improve the learning outcomes of the students (Akpabio et al., 2017). The effective use of the equipment such as laptops, computers, the internet, iPad, tablets and multimedia in English language teaching classrooms may

create a useful and effective learning environment. Moreover, the use of ICT in the Educational system in present-day world is facing a new paradigm change in instructional practices during the teaching and learning process (Akpabio et al., 2017). Information Communication and Technology (ICTs) are regarded as dynamic and powerful equipment that helps to explore the educational chances in formal and non-formal educational systems (Agal & Solutions, 2013). El-Sofany & El-Hagggar (2020) state that the beginning of using wireless devices in the classroom such as laptops, mobile phones, smart mobile phones, Apple iPods, and tablets PC can create the Learning Management System (LMS) environment in the field of education in the 21st century which is very much useful to improve the learning outcomes of the students in different subjects and the application of these wireless devices are also integrated with Wi-Fi, 4G and 5G telecommunication network which are related with the wireless technologies that allow the learners for easy access in the learning resources.

The integration of Information and Communication Technology (ICT) in community schools in Nepal has garnered increasing attention in recent years. Various factors, including accessibility, training, infrastructure, and policy support shape teachers' experiences in using ICT. Several studies highlight the positive impact of ICT on teaching and learning practices in Nepalese schools. According to Sharma et al. (2018), teachers who have access to ICT tools demonstrate improved instructional methods and enhanced student engagement. However, the study also emphasizes that such experiences are unevenly distributed, with urban schools benefiting significantly more than rural ones due to infrastructure and internet connectivity disparities.

Poudel (2019) asserts that while teachers in Nepal are increasingly aware of the potential of ICT to transform education, their

practical experience is often hindered by a lack of adequate training and technical support. Teachers frequently report feeling underprepared to integrate ICT tools effectively into their pedagogical practices, which limits their ability to utilize available technologies fully. Government policies such as the National ICT Policy 2015 and the School Sector Development Plan (2016–2023) have aimed to promote ICT in education. Despite these efforts, Adhikari and Lamsal (2020) argue that the implementation of these policies remains.

Method

A This research aims to identify the need for ICT integration in the process of teaching and learning, which directly supports the increase in the student's learning outcomes. Moreover, the proper use of ICT in teaching and learning activities mainly supports learning. The overall study addressed the need for and significance of ICT tools and equipment in effective teaching and learning.

Research Design

The research conducted its examination using a qualitative design as well as the elements from the previous research and studies. In order to reach a conclusion, this research uses primary data based on interviews and observations. As suggested by Denzin and Lincoln (2011), for the purposeful and effective gathering of data and information, I have selected the semi-structured interview based on online and face-to-face mood. The procedure of collecting data in qualitative research is very significant in this field. The interview was conducted two times because of the lack of information from the participants. About 20 minutes is allocated for each participant during the interview in the academic environment. Apart from these, I have also prepared some questionnaires for the collection of data.

As stated by Cohen et al. (2018), regarding the process of effective data analysis, we have to take the readers from the fires principle to content analysis and grounded theory. In this research, I followed the thematic analysis approach of data analysis and interpretation as suggested by Brown et al. (2023). The collected data are analyzed on the basis of different themes. The qualitative data analysis mainly focused on in-depth, context-specific, rich subjective data and meanings by the participants. In this research, the collected data are analyzed on the basis of gender, cast, ethnicity, socio-economic status and so on.

Results and Discussion

This study showed more opportunities than challenges or issues in integrating ICT into teaching and learning activities. It makes the integration of technology in education and the fact that teachers have positive perceptions, beliefs, and attitudes toward the use of ICT in teaching and learning (Kumar et al., 2022).

Challenges to Knowledge of Digital Literacy

The lack of knowledge of digital literacy among students, teachers and parents, the lack of proper electricity facilities in the rural areas and the instability of the internet in rural areas are the major challenges or issues of implementing ICT in the teaching and learning process. The use of ICT equipment is designed to boost the capacity of students to store knowledge, provide effective and active learning, and motivate students to strengthen previously taught concepts. Teachers are also motivated by the preparation of assignments, homework, peer work, projects, and other activities related to educational development. The use of ICT tools and equipment in Nepal faces several challenges due to the country's socio-economic and geographical conditions. Limited internet connectivity in rural areas, high costs of ICT devices, and inadequate

digital literacy among the population hinder the effective utilization of technology. The lack of proper infrastructure, frequent power outages, and insufficient technical support also exacerbate these issues. While urban areas show progress, the digital divide remains stark, limiting education, business, and governance opportunities in remote regions. Addressing these challenges requires coordinated efforts from the government, private sector, and international organizations Ministry of Communication and Information Technology, Nepal, 2022)

Opportunity for Enhancing Teaching and Learning

The integration of ICT tools and equipment in classrooms presents significant opportunities to enhance teaching and learning in Nepal. ICT allows for the incorporation of interactive multimedia resources, which can cater to diverse learning styles and make lessons more engaging and effective. Digital platforms facilitate access to a wealth of global educational content, enabling both teachers and students to broaden their knowledge horizons. Moreover, ICT can bridge the gap in educational quality between urban and rural schools by enabling virtual classrooms and online learning environments. Teachers can also benefit from professional development opportunities through online courses and workshops. Despite these opportunities, several challenges persist in Nepal. Limited internet connectivity and digital infrastructure in rural areas restrict access to ICT tools (Bhatta, 2021). High costs of devices and maintenance make adoption difficult, especially in public schools with limited budgets (Poudel, 2020). Digital literacy among teachers and students is often inadequate, limiting the effective use of these tools (Shrestha, 2019). Frequent power outages and unreliable electricity supply further hinder ICT integration (Aryal, 2022). Additionally, a lack

of localized content tailored to the Nepali curriculum reduces the relevance of available digital resources (Thapa, 2021). Addressing these challenges can unlock ICT's full potential in education.

Conclusion and Recommendation

The study's conclusion showed that integrating ICT in the teaching and learning process creates an open environment that enables storing and reusing information materials and an interface between the teacher and students. The research also showed that the proper use of ICT in the process of teaching and learning may lead the educational process towards success. The study presented that there are still many unanswered questions regarding the roles of ICT in education, and ICT seems to play a major role in most schools' teaching and learning processes. Therefore, it is recommended that teachers, parents, students, school administration, and other concerned stakeholders be aware of the ICT-integrated teaching and learning process. Different changes and development in infrastructure, capacity development, skill, and career development the teachers and students need to be conducted regarding the proper use of ICT in education.

References

- Agal, E. S. (2013). ICT in education: An expertise towards Quality Teaching. *International Journal of Computer Science & Network Solutions*, 1(3).
- Akpabio, E., & Ogiriki, I. B. (2017). Teachers use of information and communication technology (ICT) in teaching English language in senior secondary schools in Akwa Ibom state. *Equatorial journal of education and curriculum studies*, 2(2), 28-33.
- Brown, A. M., Sowcik, M., Stedman, N. L., & Bunch, J. C. (2023). Exploring stoicism

in leadership: A Comparison with Emotional Intelligence in Undergraduate Leadership Students. *Journal of Leadership Education*, 22(1), 19-38.

- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. Routledge.
- Dahal, N. (2019). Online assessment through Moodle platform in higher education. *ICT Integration in Education Conference* (pp. 19–21). Kathmandu, Nepal.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. Sage.
- Jayanthi, N. S., & Kumar, R. V. (2016). Use of ICT in English language teaching and learning. *Journal of English Language Teaching and Learning*, 3(2), 34-38.
- Kumar, T., Shet, J., & Parwez, M. (2022). *Technology-integration experiences in ELT classrooms as an effective tool: A theoretical study*. *JETT*, 13 (1), 51–60.
- Nguyen, L. T. H. (2021). Teachers' Perception of ICT Integration in English Language Teaching at Vietnamese Tertiary Level. *European Journal of Contemporary Education*, 10(3), 697-710.
- Rana, K., & Rana, K. (2020). ICT Integration in Teaching and Learning Activities in Higher Education: A Case Study of Nepal's Teacher Education. *Malaysian Online Journal of Educational Technology*, 8(1), 36-47.
- Rana, K., Greenwood, J., & Fox-Turnbull, W. (2020). Implementation of Nepal's education policy in ICT: Examining current practice through an ecological model. *The Electronic Journal of Information Systems in Developing Countries*, 86(2), e12118. <https://doi.org/10.1002/isd2.12118>

