

Exploring Perceptions and Practices of ICT Integration in Nepalese English Language Classrooms: Emerging Challenges

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Abstract

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Technological innovations have transformed today's pedagogical practices worldwide. However, there is limited scholarly explication about the practice of Information and Communication Technology (ICT) in Nepalese secondary school English classes. The present study explored how information communication technology is currently being practiced in class 9 and 10 English classes and to what extent its pedagogical potential is harnessed by the teachers and students in the community schools of Nepal. Informed by the phenomenological research design, three English teachers and six students were interviewed using semi-structured interview guides and observed in their respective classrooms. The study generated findings that revealed that computer-assisted and mobile-assisted instruction promote interactive learning, skill development, and learner-centered pedagogy in teaching English. Similarly, both students and teachers benefited from integrating mobile-based technology in the pedagogical practices. Students used different mobile apps such as dictionary, English videos, and YouTube to gain knowledge about the target language because of the lack of access to computer labs, whereas teachers used power-point presentation in a smart board to motivate their students to learn English. Despite the several benefits of adopting computer-assisted and mobile-assisted language learning (CALL and MALL), the participants faced various challenges, including the absence of required infrastructures in the community schools and differences in language learning skills among students. Furthermore, the participants revealed that most of the teachers lacked the skills and opportunities to upgrade their existing knowledge of ICT. The findings highlight the pedagogical significance of CALL and MALL and the need for upgrading the knowledge of secondary school English teachers. This study provides empirical evidence and vital information for policy makers, education stakeholders, and classroom English teachers

who intend to promote and facilitate language learning through the use of computers and mobile applications in Nepal.

Keywords: *English language teaching, technology integration, computer-assisted language Learning, mobile-assisted language learning, challenges*

Introduction

In recent decades, the incorporation of technology to teach languages has been one of the main concerns of pedagogy worldwide. The growing availability of technology, such as computers, cell phones, online resources and apps, has transformed English language teaching and learning practices. As a result, there has been a progressive shift from teacher-centered instruction to more learner-centered and participatory strategies that favor self-learning and empowerment (Stockwell, 2010; Godwin-Jones, 2018). In particular, Computer Assisted Language Learning (CALL) and Mobile Assisted Language Learning (MALL) are two major approaches that have been broadly implemented to transform traditional methods of language instruction and learning (Kukulska-Hulme & Shield, 2008). By using such resources, learners can benefit from authentic materials, interactive activities and instant feedback to facilitate their self-learning process.

In the context of Nepal, the integration of ICT into the educational system has been a topic of keen interest. However, it is implemented differently in various classrooms. Studies conducted in Nepalese secondary education reveal that although teachers and students have positive perceptions towards the use of ICT; the integration is hindered due to lack of infrastructure, training and technical support (Saud, 2023; Shahi and Khadka, 2025). Additionally, a number of research works have demonstrated that the use of ICT in Nepalese classrooms is at an emerging stage as most schools struggle to transform away from the conventional teacher-centered classrooms (Phuyanl, 2025; Katel, 2024). In particular, use of ICT in teaching English has proven to be very effective in terms of boosting students' interest and motivation. Nevertheless, the use of this emerging teaching methodology in Nepal faces some major challenges hindering its smooth implementation and adaptation in the classroom (Saud and Laudari, 2023). The uniform application of the recently introduced ICT practices in the field of education has become inevitable.

English is one of the major subjects offered at school level in Nepal which makes it compulsory at grades 9 and 10 (Curriculum Development Centre, 2022; Collegenp, 2022). It is considered very important as it supports students' transition from one academic level to the other and ultimately to higher studies. This subject remains very crucial as it is included in the Secondary Education Examination (SEE) and, therefore, students must perform well in order to secure good results and proceed to the next academic level. Due to the significance of this subject, integration of ICT has the potential to facilitate students' improved performance through exposing them to multiple ways of presenting information thus enabling them to become more engaged and independent learners (Phunyal, 2025; Katel, 2024). Despite the remarkable potential benefits of using ICT in language classrooms, most teachers and students are still reluctant and do not adopt it readily. They continue to use the traditional approach to teaching and learning English that involves rote learning and memorizing grammar rules without really understanding them (Neupane, 2025; Luitel, 2014). There has been a number of studies conducted in the Nepalese context regarding the use of ICT in the field of education. Most of them focused on establishing the framework needed to integrate ICT into the educational sector, implementing it in

classrooms, assessing teachers' readiness, and examining the overall impact ICT has on the field of education (Phunyal, 2025; Katel, 2024). However, there is a lack of study investigating the teachers' and students' voices and their perspectives of using Computer Assisted Language Learning (CALL) and Mobile Assisted Language Learning (MALL) in secondary education. In particular, there is a need to understand how language teachers interpret and respond to different emerging digital technologies, how students engage with technology-mediated pedagogical practices and the challenges they face while using these technologies in language classrooms.

Those factors are worth investigating since they can help shed light on how digital technologies are reinterpreted and negotiated in the Nepalese context and how they contribute to changes in language teaching and learning practices. Therefore, this study aims to explore teachers' and students' perceptions of integrating ICT into English language teaching and learning in Nepalese secondary schools by generating an in-depth understanding of their views and lived experiences of using technology in the field of education through a phenomenological study.

This study adopts a phenomenological approach to investigate the following research questions:

1. How do English teachers in Nepalese secondary schools perceive and utilize computer and mobile technologies in grades 9 and 10 classrooms?
2. How do students observe learning English through computer-assisted and mobile-assisted approaches?
3. What are the supposed benefits and challenges of integrating technology into English teaching and learning in Nepalese secondary schools?

By addressing these questions, the study seeks to contribute to a detail understanding of technology-mediated language learning in resource limited contexts, inform pedagogical strategies and guide policy development in Nepali secondary education.

Review of Literature

In the context of Nepal, Information Communication Technology (ICT) has been increasingly emphasized and incorporated into policy frameworks with regard to education. However, there are differing views on the nature and extent of its use in the classroom. According to studies conducted in Nepalese secondary schools, although teachers and students are generally positive about using ICT, its utilization in education is hindered by inadequate infrastructure, lack of technical skills and support (Saud, 2023; Shahi & Khadka, 2025). Studies also suggest that the current application of ICT in Nepalese classrooms is still in the rudimentary stages and not fully utilized beyond the traditional teacher-centered methods (Phuyanl, 2025; Katel, 2024). Regarding the use of technology in teaching English, it has been very effective in terms of engagement and motivation; however, its use is not systematic and depends on the availability of resources and the skills of each teacher (Saud & Laudari, 2023). There is a need for all schools to adopt the latest methods as it can contribute to better results.

English is taught in schools as a compulsory subject including grades 9 and 10 where students take the Secondary Education examination (SEE) which enables them to pursue higher education (Curriculum Development Centre, 2022; Collegenp, 2022). Although technology can create a conducive environment for language learning, students still depend on the conventional methods of grammar translation, memorizing and practice through lecture-based classes (Neupane, 2025; Luitel, 2014). The majority of the past studies conducted in Nepal have focused on developing policies on

ICT use in education, implementation strategies in the classroom, teachers' preparedness, and general ICT utilization (Phunyal, 2025; Katel, 2024).

However, there is a need for further exploration of the phenomenon and practical implications of using technology in teaching and learning English at secondary level. Specifically, there is a lack of understanding on how teachers and students perceive and apply Computer Assisted Language Learning (CALL) and Mobile Assisted Language Learning (MALL) in the Nepalese secondary education. The following areas have not been emphasized enough in the past studies: how teachers teach English, how they apply technology in their classes, how students learn English, how they respond to the use of technology in learning and the various pedagogical and contextual factors associated with the use of technology in the context of Nepal.

In this background, this study seeks to understand how students and teachers experience using CALL and MALL in their classes. The study is important because it can help in promoting technology use in secondary education for more effective learning and teaching. It will contribute to the existing body of knowledge in the area of technology use especially in the Nepalese context. It can also help in promoting awareness among teachers about the use of technology in English language teaching and encourage them to apply new approaches in teaching English to their students. The paper therefore uses a phenomenological approach to examine participants' experiences with regard to technology use in English language teaching and learning.

Perceptions of stakeholders are critical factors in shaping the nature of a programme. Adopting technology in educational settings is highly determined by their perceptions (Teo, 2011). Teachers' beliefs about ICT influence their willingness to integrate digital tools, their instructional applications and their confidence in adapting to changing pedagogical demands. Similarly, students' perceptions influence motivation, engagement and the extent to which technology becomes a meaningful learning resource (Lai & Gu, 2011). Global studies suggest that teachers basically recognize the pedagogical potential of ICT for improving lesson delivery, increasing learner participation and facilitating professional development (Reinders & White, 2016). Digital tools enable teachers to present content through multiple modes, diversify classroom interaction and provide individualized support. Teachers often report that multimedia-based instruction enhances students' interest and improves classroom engagement constructively by increasing active participation. Likewise, students tend to perceive technology-supported learning positively. Interactive applications, digital games, online assessments and multimedia exercises often increase motivation by making learning more engaging and accessible. MALL, in particular, promotes flexibility by enabling learners to access practice opportunities anytime and anywhere, supporting self-directed learning and allowing language practice to become part of everyday routines (Stockwell & Hubbard, 2013). In this way, ICT-based learning seems highly effective for all kinds of pedagogical endeavours.

Despite the positive perception of the participants, the researchers also discovered some of the paradoxes concerning teaching and learning. Teachers report mixed feelings and contradictions, ranging from uncertainty about integrating technology into their pedagogy, confidence in choosing the right resources for teaching and doubts about managing classes using such resources (Bingimlas, 2009). In the same way, although students benefit greatly from the use of digital tools in learning, they often express frustration and impatience when working with technologies that provide unequal

opportunities and when they cannot understand the exact purpose of particular activities (Selwyn, 2011). Such contradictions demonstrate how attitudes towards the use of ICT in education may reflect people's perceptions of this issue rather than actual experience. In the field of language learning, the use of technologies varies significantly depending on the context and institutions (Thomas, Reinders, & Warschauer, 2013). In particular, in institutional settings where a teacher has developed a comprehensive understanding of how to use ICT in the most optimal way, the use of technologies goes far beyond such a classic strategy as using word processors and online quizzes. In such classes, the use of whiteboards, collaborative writing, slide presentations, pronunciation practice programs, automated assessment systems, and online interaction with representatives of target language communities are common (Dooly, 2008). All of these tools help develop the communicative and constructivist approaches by engaging students in peer collaboration and authentic interaction. For instance, online collaboration tools provide an opportunity for students to work together and interact with each other in real time, discussing and editing the same documents and slides presentations (Godwin-Jones, 2018). Similarly, video conferencing allows for establishing contact with other people beyond the classroom, and digital games and storytelling provide ample opportunities for practicing target language with the help of engaging activities (Godwin-Jones, 2018). In general, the introduction of technologies into the language learning process serves as a tool for engaging students and supporting their autonomy in learning, which helps to overcome many of the shortcomings of the traditional classroom.

Another advantage of introducing ICT in a language classroom is that technologies allow for differentiation and individualization of instruction. For instance, with the help of the learning management system, students can monitor their progress and obtain recommendations for improving their performance (Beatty, 2010; Hattie & Timperley, 2007). Individual learning plans and differentiated instruction allow for addressing the strengths and weaknesses of each student and providing the necessary support. However, the introduction of technologies rarely goes beyond the superficial level and is not always perceived as beneficial by students and teachers. At times, the use of technologies in education is confusing when it replaces actual teaching and is aimed only at attracting attention with flashy presentations (Selwyn, 2011). Slide presentations, videos, and other types of multimedia tools are seen as only slightly better alternatives to chalkboard because they rarely help to transform the teaching and learning process. It is important to note that the key to properly integrating technology into the language classroom is to understand that these tools are simply a means of instruction, and not the goal in and of themselves (Godwin-Jones, 2018; El Gazi et al., 2024). In fact, the pedagogical value of technologies is conditional upon their ability to engage students in the learning process. It is this engagement that allows for maximizing the learning outcomes and helping to overcome many of the shortcomings of the traditional language classroom.

However, despite the many potential benefits of integrating technology into the language learning process, there are a number of obstacles that significantly reduce the possibility of successfully implementing such solutions. First of all, it is important to note that the widespread adoption of modern technologies in education faces significant systemic barriers associated with both the infrastructure and the attitudes of various stakeholders in the educational process. In the context of Nepal, there are many community schools, especially in rural areas, where resources, electricity and stable Internet access are unavailable (Giri, 2019; Dhakal, 2020). At the same time, even in urban and

well-developed schools, proper infrastructure in the form of technological devices and multimedia equipment is limited. Another obstacle to the widespread adoption of the technology-based instruction is the lack of training and preparation of teaching staff. Equipping the learning process with the latest digital tools requires not only technical knowledge and skills but also the ability to understand how to use technologies optimally to maximize learning outcomes (Shrestha, 2018). At the same time, the systemic nature of the education system complicates the use of technologies in education. For example, in Nepalese schools, which operate within the framework of a centralized curricular design, the use of technologies in teaching is undermined by the need to prepare students for exams (Lituañas & Ferenal, 2025). In other words, the teacher's understanding of his or her role and responsibilities is key to successfully introducing innovations. In addition, the perception of technologies adopted by school principals can also be an obstacle to their adoption and use (David & Senthilkumar, 2019; Bantaculo, 2024). A particular threat to the introduction of technologies into the educational process, especially in the language classroom, stems from the fact that students and teachers often perceive it as an additional tool rather than a necessity. The cultural perception of teaching and learning has so far been dominated by such traditional methods as grammar-based instruction and reading books (Springer, 2025). Subsequently, technologies are viewed by many as an alternative, which does not seem immediately beneficial. In addition, many teachers in Nepal are used to operating in a highly hierarchical system, which means they are unable to build equal and mutually respectful contact with students (Springer, 2025). As such, the use of technologies in the language classroom is not only a pedagogical but also a socio-cultural issue that requires a coordinated and systematic approach to its implementation.

The issue of integrating information and communication technologies (ICT) into language learning has been widely discussed by many scholars, and the general tendency demonstrates that the situation in this field in Nepal is complex and multifaceted. Over the last two decades, there has been a continuous rise in the Nepalese government's interest in applying different kinds of technologies in the educational process. The current education system is undergoing reforms and changes to the curricula to make it more relevant and modern (Giri, 2019). However, the introduction of these innovations is uneven and inconsistent in different schools because of huge funding and infrastructural inequalities (Dhakal, 2020) and the lack of training for teaching staff (Shrestha, 2018). There is a wide range of initiatives and projects related to the integration of new technologies in schools but they do not always consider local opportunities and challenges. As a result, although the use of technologies in education has become increasingly popular, it remains at a relatively low level. This is primarily due to the fact that teachers in Nepal generally have an insufficient level of technical literacy and do not have a clear understanding of how to use ICT in a meaningful way for the language learning process. In fact, most of the initiatives that have been implemented so far are examples of superficial technology introduction, which are aimed only at attracting student attention. With regard to the classroom practices and language learning outcomes, they rarely go beyond the boundaries of the traditional educational paradigm. However, there are also encouraging examples of Nepalese language teachers adopting innovative practices and using digital tools in the language classroom. The use of technologies for teaching vocabulary, discussion forums to discuss various issues, online testing, and practice pronunciation has been reported (Thapaliya, 2021; Rai, 2022). It is evident that these

examples illustrate a desire to move away from textbook learning and engage students in more active language learning activities. Nevertheless, they usually occur only in isolated cases and without the involvement of other stakeholders.

This paper aims to investigate the use of information and communication technologies in the English language classroom in Nepal. In particular, the study explores the perceptions and practices of English teachers and students. The study was guided primarily by the following two theoretical frameworks. First, by the Sociocultural Theory proposed by Vygotsky (1978), which views learning as a socially constructive process and highlights the importance of social interaction for language development. Second, the study was guided by the theory of skill acquisition proposed by Anderson (1982). According to this theory, learning is a phase-based process that involves the transition from declarative knowledge to procedural skill through practice and repetition. The relevance of these theories to the current research is explained by the fact that they help to understand the role of technologies in learning English. In particular, the use of Computer Assisted Language Learning (CALL) technologies and Mobile Assisted Language Learning (MALL) fits perfectly into the framework of Sociocultural Theory because the interaction with peers through such tools allows for maximizing the language learning potential of each student. Similarly, the use of CALL/MALL for repetitive practice of lexical, grammatical, and phonological material helps automatize the process of language learning in accordance with the theory of skill acquisition and reduce the cognitive load on students (DeKeyser, 2007).

Despite the number of studies on the integration of ICT in Nepalese schools, there is a lack of evidence-based information on how English teachers and students perceive this issue. In other words, there is a need for more practical and empirical evidence that would demonstrate the potential benefits of technologies in the English classroom. So far as indicated by Nepalese, this topic deserves more attention and detailed consideration because it is of great relevance to the Nepali educational mechanism. I think, it might be interesting to find out how the widespread use of technologies will affect the learning of the English language in schools. Also, it may be interesting to conduct a comparison of teachers' and students' attitudes to this issue. It is rather surprising to learn how much teachers know and how they perceive introducing innovations into the educational process. At the same time, the attitudes towards technologies of school principals play an important role as well because they are the ones who can help or hinder the spread of technologies in schools. In the context of language learning, I think it is crucial to find out how students feel about the use technologies in the classroom because it allows for a better understanding of how such tools can be used to maximize language learning potential. Finally, it seems to me that investigating this issue is also important in terms of the overall pedagogical development of the country because it will help to identify the strengths and weaknesses of the Nepalese education system and find ways to overcome existing shortcomings.

Methodology

This study adopted a qualitative phenomenological research design within an interpretivist paradigm to explore teachers' and students' perceptions and practices of ICT integration in Nepalese secondary English language classrooms. The adoption of a phenomenological design was significant because it enabled the study to capture the lived experiences of teachers and students regarding ICT integration in Nepalese secondary English classrooms, symmetric with Creswell's (2013) emphasis on

phenomenology as a means of exploring participants' perceptions and meanings in depth. The study was conducted in selected secondary schools in the Pokhara Valley including both community and institutional schools. A purposive sampling technique was used to select nine participants, comprising three secondary-level English teachers and six students from grades 9 and 10. Teacher participants were selected based on their teaching experience at secondary level and involvement in using ICT tools in English language teaching, while the student participants were selected based on their exposure to ICT-supported English language classroom.

I interviewed the subjects and conducted observations of classrooms in which I did not participate to obtain data. The interviews were used to understand the respondents' lived experiences with incorporating information and communication technology (ICT). Observations helped to gain an insight into the practices in which participants engaged. Additionally, the study relied on secondary sources of information ranging from journal articles to policy documents in support of the primary data. Finally, I employed a thematic analysis approach to identify common themes in participants' responses and observations, thus examining ICT integration processes critically according to their perceptions, practices, and challenges. The research process respected ethical principles of confidentiality and informed consent and adhered to regulations such as voluntary participation.

Results

This section presents the results of classroom observations and interview data analyses relating to classroom experiences of technology-supported teaching of grades 9 and 10 English. Following transcription and coding processes, the findings explicate how participants experienced technology-assisted language learning practices within the Nepalese school context. Four themes emerged from the analyses: technology as a facilitator of student engagement, language skill development, barriers to technology-assisted learning, and teacher roles and pedagogy.

Technology as a Facilitator of Students' Engagement

Both teachers and students perceived technology as playing an essential role in creating conditions conducive to student engagement and interaction. Teachers and students reported feeling more engaged and interactive with technology-assisted lessons. The use of technology to present course content and related audio-visual materials, online quizzes and self-starting language learning applications seemed to create a sense of involvement and participation among students. In particular, T3 noted that students' "curiosity increases as they see video and take online quizzes. Moreover, they participate in all activities boldly and freely without any hesitation." Similarly, one of the students (S4) agreed, and said, "Students felt excited and more motivated to learn course content presented by using audio-visual materials on multimedia devices. Such content appeared easier to learn compared with content presented orally". These findings suggest that students felt more involved and interactive with technology-assisted lessons, thus being more confident and motivated to participate in classroom activities. Furthermore, classroom observations revealed that students paid more attention and interacted more actively when lessons were presented by using digital technologies. Thus, technology-assisted lessons appeared to facilitate interaction and reduce monotony in regular lessons.

These findings align with previous research on student engagement and motivation, suggesting that digital technologies facilitate engagement and active participation (Stockwell, 2010; Godwin-

Jones, 2018). Consistently with prior empirical studies, participants also perceived that technology-assisted language learning practices promoted learning in a more student-centered manner compared with traditional teacher-centered practices dominating Nepalese secondary education contexts.

Technology-Based Language Skill Development

Both teachers and students perceived that digital technologies could facilitate lexical development in a number of ways. In particular, participants identified dictionary and vocabulary-building applications as useful tools that enable students to practice and reinforce their lexical proficiency. Regarding this, one teacher (T2) remarked, “Language learning applications help students learn new words and use them in real-life interactions. They also enable students to memorize new words effortlessly, compared with other traditional vocabulary-building methods.” Similarly, another student (S2) argued:

Using mobile phones and computers in class has allowed us to learn at our own pace. It has also helped us to review challenging learning material outside of class hours. This has increased our confidence and allowed us to try out new things individually.

These findings suggest that students used technology as an effective self-learning tool that allowed them to practice language learning skills repeatedly and independently. Moreover, technology-assisted practices allowed students to gain more confidence and autonomy in learning challenging skills on their own. Additionally, classroom observations revealed that students learned new words by searching for their meanings and then using such words in translated sentences presented in Nepali. Similarly, observed students tried to apply complex lexical items in their own sentences spontaneously. Thus, technology appeared to facilitate lexical development both through direct lexical instruction and through opportunities for practice offered by technology-assisted activities.

These findings align with John Robert Anderson’s Skill Acquisition Theory that emphasizes the role of practice in skill development. In particular, practice allowed students to transform lexical knowledge from declarative to procedural forms. Additionally, the findings are consistent with previous empirical studies exploring the use of computer-assisted and mobile-assisted language learning practices. In particular, such practices were found to facilitate lexical retention, communicative competence, and autonomous language learning (Godwin-Jones, 2018; Kukulska-Hulme & Shield, 2008). Therefore, within the local educational context, students also appeared to benefit from various computer-assisted language learning practices.

Barriers to Technology-Assisted Learning

Several barriers hindered effective use of technology-assisted practices in English language learning. In particular, participants identified the absence of sufficient technological resources, unstable electricity and internet connections, and a lack of appropriate pedagogical strategies as major barriers to effective use of technology-assisted practices within the local educational context. One of the teachers (T1) explained, “Sometimes the internet connection is unstable or students use devices for non-educational purposes. Thus, it is hard to learn course contents using technology”. Additionally, students also complained about the unavailability of relevant digital resources and non-educational use of digital devices by their peers. These barriers were also observable during classroom observations where researchers saw that electricity was unstable in the school, interrupting the use of technological

devices on two occasions.

This finding suggests that despite opportunities for engagement and interactivity offered by technological devices, their effective use was impeded by several environmental and institutional factors. Thus, participants perceived that the success of technology-assisted practices depended to a considerable extent on institutional support and available resources. Technology-assisted language learning practices were only effective when sufficient institutional support was available, as well as stable internet and electricity. These findings were consistent with prior empirical studies conducted in the local Nepalese context (Dhakal, 2020; Shrestha, 2018) who noted that inadequate infrastructural resources are the major hindering factors in integrating technology into education.

Evolving Roles of Teachers in Pedagogical Transformation

The findings also revealed that technology integration in language learning changed teacher roles and pedagogy in several ways. Teachers reported that introduction of technological devices in the classroom allowed them to shift from traditional teacher-centered pedagogy to a more collaborative and student-centered approach. In particular, the use of digital technologies as mediators for communication and interaction allowed teachers to promote cooperative learning and provide students with ample opportunities for participation and collaboration. Regarding this, T3 said, “I tend to create more peer and group activities using computer applications that allow students to interact with each other and support each other while learning new vocabulary and grammar”. Similarly, students also appreciated the new opportunities for participation enabled by technology-assisted practices. In particular, according to one of the students (S5) said, “Teachers should be updated with current developments and should be aware of how modern technologies work. Some of them are not as competent as they should be and continue to use traditional methods and activities that appear obsolete”. This student’s comment suggests that he perceived that effective use of technology-transformed pedagogy was related to teachers’ readiness to update their pedagogical practices and adopt new opportunities offered by technological devices. This assumption was supported by classroom observations that revealed that teachers who were more confident in using technology-assisted practices seemed more effective in promoting participation and collaboration.

These findings are consistent with Vygotsky’s (1978) Sociocultural Theory that highlights the importance of social interaction during the process of learning. In particular, technology-assisted practices created opportunities for peer and group interactions that facilitated collaborative language learning. Moreover, teachers used technology-assisted practices as mediators of communication and collaboration, thus shaping students’ language learning experiences. These findings also suggest that while technology-assisted practices created opportunities for interaction and participation, such opportunities were dependent on teachers’ readiness to adopt these practices.

Discussion

The findings of this study indicate that the incorporation of technology in Nepalese secondary-level English instructional processes offered possibilities for more engaging, learner-centered, and flexible modes of classroom interactions. At the same time, these data demonstrate that the impact of technologically assisted instructions was largely determined by the existing contextual limitations and students’ and teachers’ attitudes toward such mode of delivery. This study highlights the importance

of technology in EFL classrooms as both a pedagogical tool and a social construct shaping the interactions between students and teachers. Perhaps, the most significant finding of this research is that the incorporation of digital resources into the pedagogical process elevated students' engagement in the learning of English. Both teachers and students reported that the use of multimedia instruments, videos, language-related applications, and interactive online assessments enabled the creation of a more exciting learning experience as compared to the classical textbook-based English courses. They pointed out that such tools facilitated students' eagerness to learn English, as well as their willingness to participate in classroom communications. This finding implies that technology may act as an effective motivator of language learning and contribute to students' enhanced self-confidence and engagement in classroom verbal interactions.

The findings of this study confirm the results of prior research endeavors exploring technology's impact on students' motivation and engagement (Stockwell, 2010; Godwin-Jones, 2018). However, unlike previous studies reporting on the role of technology in student engagement and motivation in general, this research specifies the participants' positive attitudes toward multimedia-assisted learning in particular. Thus, it demonstrates that, in Nepalese language learning contexts, technology tends to be viewed as a substitute for the traditional rote-learning. Thus, the study suggests that the integration of the discussed tools into the didactic process enables moving from the teacher-centered, classical modes of delivery to a more interactive and engaging experience. Therefore, in terms of pedagogical implications, the practical application of the findings of this study may be regarded as rather significant.

Another important finding of this research is that the implementation of technology-assisted instructions enabled more convenient language acquisition, particularly in regard to developing students' receptive vocabulary skills. The participants demonstrated that technology-assisted language learning allowed them to revisit the material multiple times to ensure their understanding of it. They pointed out that the utilization of such online tools as electronic dictionaries or mobile language-learning applications enabled them to practice English independently and outside the classroom. This finding suggests that the use of the discussed tools facilitated students' autonomous learning (Anderson, 2004) and enhanced their learning experiences with computers and other digital devices. Additionally, the reported benefit aligns with the findings of the prior literature concerning the effectiveness of computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) concerning students' enhanced receptive vocabulary skills (Godwin-Jones, 2018; Kukulska-Hulme & Shield, 2008). The findings of this study add to the discussion of technology-based benefits in language learning by specifying the positive attitudes of Nepalese students toward technology-assisted English acquisition.

Nevertheless, the findings of this study also demonstrated that the use of technological tools in English language learning was not devoid of limitations. The participants reported that the lack of appropriate infrastructure, electricity, and the teachers' access to related training hindered the seamless utilization of technology in the educational process. This finding suggests that despite technology's potential pedagogical benefits, its successful implementation requires organizations' support and efforts to enhance the infrastructure and staff training in accordance with the needs of the students and teachers. The reported limitation is in line with the prior research conducted in Nepal that also revealed that infrastructural and organizational limitations hindered the complete incorporation of

technology into the educational process (Shrestha, 2018; Dhakal, 2020). However, unlike the prior studies reporting on the influence of such limitations on the general adoption of technology by different institutions, this research specifies such hindrances in regard to the EFL learning contexts. In particular, the findings of this study demonstrate that the students and teachers of institutional schools are largely at weakness compared to their counterparts due to the former's limited resources. This concern may be especially acute in Nepal, considering that many institutional schools aim to attract clients by securing better infrastructure, whereas the government does not offer its educational facilities enough support to ensure the similar conditions.

Another critical finding of this study is that the participants report technology-assisted classes to reshape teacher-student dynamics, enabling more student-oriented interactions in the center of which is the concept of cooperation. Teachers who incorporated technology into their practices reported that it allowed them to promote collaborative learning among their students. At the same time, some students mentioned that some of their teachers failed to adapt to the new conditions and continued to apply the traditional didactic approaches. These findings demonstrate that although technology-assisted English classes allow for a more learner-centered experience, their successful utilization is largely dependent on the teachers' readiness for such a transition. In particular, the teachers' flexibility and the opportunities for their technological competencies' development may play a crucial role in the process. The findings of this study align with the principles of Vygotsky's sociocultural theory and confirm some of the prior research findings in regard to technology's capacity to reshape traditional didactic interactions in the educational settings (Stockwell, 2010). Thus, this study's findings indicate that the practical application of technology within EFL classrooms may offer opportunities for reshaping teacher-student interactions into more collaborative experiences.

Overall, the findings of this study demonstrate the potential of technology-assisted English learning in the Nepalese secondary-level contexts. However, as indicated by the findings of this research, such utilization of technological tools is largely dependent on teachers' adaptability, as well as the students', teachers', and institutions' access to technological resources. For example, the participants of this study highlighted the limited access to multimedia equipment in many educational facilities, which in particular conditions may be inaccessible to some students despite their desire to learn English. When asked about the absence of multimedia equipment in some of the institutions, one head teacher explicitly stated that the government does not provide schools with the necessary infrastructure. In this regard, it may be concluded that the practical application of the findings of this study requires additional efforts from the relevant stakeholders to ensure the accessibility of the discussed opportunities to the general audience. Thus, this research contributes to the discussion of technology's impact on the EFL learning process and provides valuable insights into the attitudes of Nepalese students toward such an initiative.

Moreover, this research helps elucidate the general discourse of technology utilization in language learning through the lens of the participants' experiences and attitudes toward such assistance. In particular, the findings of this study demonstrate that the practical application of such tools tends to be viewed as rather beneficial by the students and teachers. However, such benefits are largely contingent upon the students' access to appropriate infrastructure as well as the staff's readiness for such an endeavor. Therefore, in the context of Nepalese EFL learning settings, the current opportunities

for technology-assisted English acquisition may be viewed as rather limited by many students. This study indicates the importance of addressing the highlighted opportunities and limitations through enhanced collaboration between different stakeholders.

Conclusion and Implications

The researchers conducted a phenomenological study titled ‘Exploring Perceptions and Practices of ICT Integration in Nepalese English Language Classrooms: Emerging Challenges.’ The main purpose of the study was to establish how information and communication technologies (ICT) are currently implemented in the teaching and learning process in Nepal. The study adopted an explanatory phenomenological design involving classroom observations, interviews, and surveys to evaluate how teachers and students perceive the use of ICT in the language classrooms. The specific focus of the researcher was to uncover the role of ICT such as smart boards, applications, and online resources in facilitating language learning and teaching.

From the study, it is evident that technology can be utilized to raise students’ interest and aid comprehension and acquisition of new vocabulary. Both students and teachers revealed that the use of visual aids, digital dictionaries, and applications facilitates faster and better understanding of the language. The four themes emerged include technology as an influential tool for students’ engagement, technology as a tool for language skill development, pedagogical and institutional constraints of using ICT to facilitate language learning and evolving roles of teachers in pedagogical transformation.

The study concluded that the implementation of ICT in the classrooms minimizes students’ anxiety and boosts their confidence in speaking and learning the language. The use of technology offers authentic material to students which is effective, especially for those in government-funded community schools who do not have access to native speakers of the language. Through the use of these materials, the students can also review lessons, practice independently and clarify concepts, thus, complementing the traditional teacher-centered method. It was also revealed that technology motivates students, leading to better learning outcomes.

The responses of both students and teachers demonstrated that their perceptions on the use of technology in language learning were dependent on their context. The students who attended classes in community schools revealed that they relied on their phones, online translators, and video materials to understand their lessons and acquire language skills. On the other hand, the students and teachers in English medium institutional schools asserted that they needed more advanced approaches to improve their language proficiency. The findings suggest the need to consider the context and needs of students before implementing any form of technology in language learning classrooms.

The study stresses on the need to invest more in teacher training and provide appropriate institutional and policy support to speed up the process of integrating technology into the Nepalese EFL classrooms. There is a need for the government, policymakers, administrators, and teachers to come together and make technology-assisted language learning and teaching more accessible and sustainable. Classroom and empirical studies on the use of ICT in Nepal will be critical in informing future research.

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