

# ICT Integration in English Language Classrooms: Practices, Opportunities, and Challenges

**Ram Nath Neupane, PhD**

[ramnath.tmc@gmail.com](mailto:ramnath.tmc@gmail.com)

<http://orcid.org/0009-0009-0708-6752>

Tribhuvan University

**Article History:** Received 20 March 2025; Reviewed 28 June 2025; Revised 12 September 2025; Accepted 10 November 2025

## Abstract

The present study aims to explore the practices, opportunities, and challenges of ICT integration in English language teaching. To accomplish this, data were purposively collected from seven English language teachers of the Rupandehi district through semi-structured interviews. The study reveals that the integration of ICT is essential for English language teachers. It not only makes the teaching-learning process more interactive and interesting, but also motivates the students and makes the lessons goal-oriented. It also integrates four language skills for effective learning. Teachers employ ICT tools to prepare teaching materials, to plan lessons, and evaluate students. Teachers use various ICT tools, such as mobile, laptop, iPod, internet, email, and social media apps in language classrooms. ICT helps the teachers be up to date with recent innovation and new trends of teaching, making the classroom teaching more practical and interactive. It helps the teachers and students collaborate and interact to each other, fostering students' creativity, logical power and critical thinking strategy. It promotes higher order thinking to evaluate the knowledge and skills. However, teachers face various challenges, such as lack of confidence, motivation, and technical knowledge of using ICT in the classrooms.

**Keywords:** ICT integration, teachers' practices, ICT tools, benefits and challenges

## Introduction

The widespread adoption of Information and Communication Technologies (ICT) has significantly influenced various aspects of life, including education. ICT integrates different computer and internet-based technologies, with related software and applications (Marcelle, 2000). It is the combination of hardware and technology used to create, disseminate, store, manage and analyze information (Tinio, 2002; Zakaria & Khalid, 2016). ICT incorporates the technologies such as radio, television, telephones, computers, satellites, wireless systems, and internet (UNDP, 2003). ICT is a powerful tool for enhancing quality of teaching and learning (Chan, 2023). Over past few decades, the integration of ICT into educational landscape has transformed traditional teaching and learning processes. It offers new opportunities for enhancing the quality and accessibility of education (Huseinovic, 2023). The use of ICT in education is essential for quality education.

The advent of ICT has changed the various sectors and education is no exception. Technology integration has become an important part of educational system in the 21<sup>st</sup> century learning environment (Parette & Blum, 2013). It has significantly influenced the education sector, with growing needs for creating technology-friendly teaching and learning environments. The use of ICT has expanded widely to enhance administrative efficiency as well as the quality of teaching and learning (Abdel-Rahman & Ayman, 2011). ICT in education enhances learner's performance by providing with new, innovative skills and resources. It also facilitates teaching by training them in various ICT approaches and rules (UNESCO, 2014). This indicates that educational institutions are employing ICT tools to promote their overall development.

The rapid development of ICT has brought significant transformations in the 21<sup>st</sup> century, shaping the expectations of modern societies. ICT has become an important pillar of modern life (Joshi, 2017). It plays a vital role in daily life and in educational systems, supporting educational institutions to adopt it to equip students with essential 21<sup>st</sup>-century skills. The integration of technology into existing educational environments facilitates meaningful learning and enhances professional competence (Tomei, 2005). So, many educational institutions are revising their curricula and upgrading facilities to reduce the technological gap in teaching and learning.

Creating ICT-enriched classrooms has become essential for effective teaching and learning. The Ministry of Education has also recognized ICT's potential to improve educational delivery, outcomes, and impact, as reflected in national policies and strategies. The *ICT Master Plan (2013)* emphasizes ICT's capacity to expand educational opportunities and promotes e-education initiatives. This indicates the importance of computer education in fostering technological and scientific progress while advocating for broader ICT integration to improve the quality of education.

In this context, this study aims to examine secondary-level teachers' attitudes toward the impact of ICT integration in English language teaching, as well as to explore their practices, and the challenges they face in implementing these technologies in the classroom.

## Literature Review

Interactive and dynamic nature of ICT enables to address learners' diverse needs, foster learner autonomy, and enhance overall quality of teaching. The integration of ICT in English language teaching is highly significant because it enhances communication, builds home-school connection, and provides authentic resources for language learning. ICT tools are the building blocks of modern society (Daniels, 2002). Many countries in the world believe that ICT skills are the core competencies with literacy and numeracy. For UNO (1999), ICT includes Internet services, telecommunications, broadcasting, and other related communication activities with applications for education, ranging from older tools such as radio, television, and teleconferencing to newer platforms such as email, interactive websites, audio-visual materials, and CD-ROMs.

ICT tools and resources play an important role in language teaching and learning. Traditional media, such as radio and television are effective instructional resources for language education (Tinio, 2002). More recent tools, such as PowerPoint, multimedia projectors,

e-books, audio-books, webinars, interactive whiteboards, mobile applications, and web-based platforms, provide diverse opportunities for language learners to practice skills, access authentic materials, and engage in collaborative tasks. The Internet offers the students with a chance to access vast resources, produce essays and projects, and communicate with native speakers through email or online exchanges (Grace & Kenny, 2003). Language lab, audio-visual aids, and mobile learning tools further expands learners' opportunities to improve their pronunciation, grammar, and communicative skills.

The importance of ICT in language education has been widely explored. Studies (Wong et al., 2006; Gillespie, 2006) suggest that ICT can raise motivation, develop autonomous learning, minimize teacher-centered instruction, and enhance collaborative and interactive atmosphere. ICT helps learners to access authentic resources, build confidence, and promote higher-order thinking skills. However, the success of ICT integration varies depending on context, curriculum, and teacher practices (BECTA, 2003).

Information and Communication Technology (ICT) has become an integral part of English language teaching and learning. As a developing country, the concept of ICT in Nepal has emerged later than other developed countries in the world, however, its impact has been increasing day by day in every sectors of life. In the field of education, it provides quality learning opportunities and develops competitive human resources. The integration of ICT with pedagogy is shaped by knowledge, competence and skills they learn during their college years (Thomas et al., 2013). However, the secondary level curriculum of Nepal considers ICT as a subject rather than as a pedagogical tool. While the global trend is moving toward blended learning models enhanced by digital resources, Nepal is struggling in planning, implementation, and the maintenance of proper records on technology use in schools.

Nepal has also developed several ICT-related educational policies over the past two decades. The first ICT Policy was introduced in 2000 and revised it in 2010, improving Internet access in schools in association with government and non-government agencies (Joshi, 2017; Karki, 2019). Under the School Sector Reform Plan (2009–2015), ICT-based instruction strategies were developed, while the Three-Year Plan (2011–2013) decided to encourage ICT use in remote schools to reduce the digital divide. The ICT Master Plan (2013–2017) stressed on equal access to ICT for promoting educational quality, and the School Sector Development Plan (2016–2023) placed ICT as an essential component of the curriculum. However, these policies are silent on practical aspects such as digital infrastructure, connectivity, and technical support. The implementation part becomes centralized, leaving significant gaps between policy and practice (Rana, 2018).

ICT in education has become a means to achieve educational goals in Nepal. Various policies and activities have been developed to extend its use. The National Center for Educational Development (NCED), for example, now conduct many programs for developing teachers through radio and television programs, and computer has been introduced as a subject at the secondary level. Furthermore, the Ministry of Education (MOE) has taken ICT initiatives by establishing computer labs in schools, connecting classrooms via, Internet, and developing interactive digital

learning materials in core subjects such as Nepali, mathematics, English, and science (Bhattarai, 2017). Despite these, ICT equipment in schools has been used more for administrative purposes.

The ICT in Education Master Plan (2013–2017) was a landmark initiative to link Nepal with national and international educational goals of education. Infrastructure development, human resource development, the creation of digital learning materials, and the enhancement of the education system are its major four components. The plan also highlighted teacher preparation for ICT-based education, integration of ICT skills into teacher evaluation and training, and the promotion of lifelong learning through distance and open education. Such initiatives have shown that ICT implementation in Nepal needs not only resources but also continuous training, motivation, and opportunities for teachers.

Despite its importance, implementing ICT in language classroom has many challenges in its integration into language learning. They include inadequate infrastructure, lack of reliable Internet access, high costs of devices, and limited technical support. There are some teacher-related challenges, such as low ICT skills, insufficient training, and lack of confidence, which hinder effective use (Hara, 1998) and some learner-related challenges, including differences in age, learning styles, motivation, and digital literacy which affect outcomes (Mullenberg, 2001). These challenges highlight the need for greater investment in teacher preparation, digital literacy programs, and sustainable infrastructure.

Aforementioned studies suggest that ICT plays a significant role in improving teaching and learning in Nepal, particularly in the area of English language education. However, the gap between policy and practice, remains infrastructural limitations, and lack of adequate teacher training pose serious challenges. While ICT can enhance learner autonomy, motivation, and engagement, its effectiveness in Nepal ultimately depends on continuous policy implementation, contextualized teacher training, and equitable access to resources.

### **Current Landscapes and Research Gaps**

Previous studies have shown students' and teachers' attitudes, perceptions, and experiences with ICT integration in English language teaching and learning. Combining ICT with conventional teaching promotes teaching and learning outcomes (Neumeier, 2005). The most higher secondary English teachers in Kathmandu Valley had positive attitudes toward computers and the Internet, with a growing interest in expanding access (Khanal, 2008). Ibrahim (2010) focused on the shift from teacher-centered to learner-centered approaches supported by ICT, while Shrestha (2012) revealed that English teachers use online resources mostly for personal development and communication. For Makura (2014), students in higher education largely consider technology, reflecting limited exposure to diverse ICT tools.

Studies on effectiveness of ICT in English language teaching have positive outcomes. ICT implementation improves students' readiness and competence. Technology enhances learners' exposure to meaningful language input. Linton (2015) emphasized the need for technology integration despite students' limited ability to use it independently. Yadav (2016) emphasized that online resources support students' academic development, though lack of teacher training

and infrastructure remain challenges. Teachers' challenges have also been a research focus. There are some key issues such as limited accessibility, weak technical support, insufficient training, and gender differences in ICT use. The use of technology develops learner autonomy, motivation, and student-centered learning (Singh, 2019). ICT also motivates students and supports active participation in language learning.

These studies suggest that ICT positively impacts language learning by increasing student motivation, enhancing participation, and improving learning outcomes. However, they also reveal many challenges such as infrastructure gaps, unequal access, inadequate teacher training, and underutilization of available tools. Few studies have specifically examined the attitudes of basic-level students at Tribhuvan University-affiliated campuses, indicating a research gap that the present study aims to address.

## Methodology

The researcher adopted interpretivism as philosophical paradigm and descriptive phenomenology as research design to accomplish this research. Phenomenology is a valuable investigative technique in qualitative research which expresses the essence of participants' lived experiences (Creswell, & Creswell, 2020). It offers the valuable insights into the complexity of human lives, cultures, and behaviour. Here, the present research is based on the lived experiences of English language teachers of Nepal. However, only seven teachers from Rupandehi district were purposively selected. Similarly, an interview guideline was prepared, and then the interview was conducted with the sampled teachers using recording devices to obtain necessary information. After that, the collected data were analyzed thematically under different headings. After exploring the results of the study, the results were interpreted by comparing their features with those of previous research works. To assure participants' confidentiality and anonymity, all identifying information from the transcripts has been removed, and the participants have been recognized as per identification codes. The code T (teachers) in the results and discussion section helps to identify the source of quotations.

## Findings and Discussion

After conducting interviews with teachers, the finding is organized under three specific themes. These themes provide a framework for analyzing the data, highlighting key insights, recurring patterns, and the teachers' perceptions and experiences with the subject.

### Practices of ICT Integration in ELT

Teachers employ various ICT tools such as laptop, mobile, and iPod in the language classrooms. They can also use Internet, e-books, online-dictionaries while teaching and assessing students. However, the frequency of employing them is different from one institution to another. Teachers can integrate ICT in lesson planning, material development, and classroom interaction as T1 reported,

*I adopt various ICT tools and apps in my language classrooms. The use of such tools make our class more interactive and goal-oriented. I frequently use such ICT tools while planning language lessons, preparing instructional materials, doing research activities and assessing students.*

This reveals that teachers use ICT to make their class more interactive and motivating. They also assess students through the use of ICT tools. However, the efficacy of using these technologies in education process heavily relies on the teachers' expertise in how to use them (Yadav, 2023).

All teachers do not use ICT in the language classroom. Urban and trained teachers use them frequently while new and untrained teachers from remote area do not use them frequently. Students in Urban areas have easier access to ICT, whereas students studying at remote area have hardly access to technologies, which eventually create a digital divide (MOE, 2013), as T2 reported:

*For me, there are various reasons for not applying ICT in language classrooms. To begin with, I lack adequate knowledge, support, and motivation to integrate it effectively. Our many classrooms do not have computers, projectors and interactive whiteboards, so we heavily depend on textbooks and other printed materials. Beside, use of ICT requires considerable preparation time, and creating slides or videos is impractical when we have to prepare more than 6 periods a day.*

It reveals that ICT is not employed regularly in the language classrooms due to various reasons. The most striking problem is lack of resource, and time. Using ICT in EFL classrooms includes a wide range of activities that integrate digital tools and resources into language teaching and learning. Teachers employ multimedia presentations, online platforms, language learning apps, and virtual communication tools to make lessons more interactive and engaging. For example, PowerPoint, videos, and online quizzes can be used to present vocabulary, grammar, and cultural content in visually appealing ways. Similarly, tools such as Google Classroom, Zoom, or Microsoft Teams facilitate blended and online learning environments, helping students to collaborate, submit assignments, and receive feedback digitally.

Moreover, ICT integration supports communicative and task-based approaches in EFL instruction. Teachers often employ online discussion forums, digital storytelling, and social media platforms to develop students' speaking and writing fluency through authentic communication. The use of online dictionaries, and language analysis tools also promotes learners' grammatical awareness and vocabulary development. However, effective ICT practices depend on teachers' digital literacy, institutional support, and students' access to technology. When thoughtfully implemented, ICT can bridge the gap between classroom learning and real-world language use, making English learning more meaningful, flexible, and learner-centered.

### **Opportunities of ICT Integration in EFL Classrooms**

ICT has become inevitable tool in every day classroom teaching and learning. It provides a chance to teachers as well as students to increase the quality of education and meet the requirements set by the modern complicated society. ICT has become essential tool for educational change and reform. It has been influencing our lives in the fields of education, healthcare, and business. Information and communication technology in schools can be used as a school communication tool to improve student learning and better teaching techniques. With the

advancement of technology in education, schools adopt their own communication softwares to transmit, store, share or exchange information. In this technological era, ICT in education has compelled many schools to get accustomed to smart technology. Government of Nepal has also included ICT as one of the subject in school level education. ICT provides more opportunities for communication between peer learners.

ICT is a double-edged sword which has proven to be a valuable tool to solving the problems and accomplishing the tasks in education and many other human endeavors. It has become a boon in the field of English language teaching and learning because of the following importance as reported by T5.

*ICT helps the teachers be up to date with recent innovation and new trends of teaching, making the classroom teaching more practical and sustainable. It helps the teachers and students collaborate and interact to each other, fostering students' creativity, logical power and critical thinking strategy. ICT generates motivation, enthusiasm, and readiness and avoids monotony in teaching learning activity. It promotes higher order thinking to evaluate the knowledge and skills.*

ICT has an impact on nearly every aspect of our lives from working to socializing, learning to playing. The digital age has transformed the way young people communicate, network, seek information and learn. ICT offers teachers with vast content knowledge and pedagogical skills, which they can use for better and effective language teaching and administrative tasks (Paudel, 2023). ICT is a catalyst for change and innovation within educational sector (Chang et al., 2024). The use of ICT motivates students towards person, makes them more creative, analytical and constructive (Thapalia, 2014; Tha, 2017). Tinio (2002) claims, any technologies related to ICT are regarded "as potentially powerful enabling tools for educational change and reform." Technology based teaching methodology has reformed the traditional teaching method and given it a new shape. IT has changed the classroom ideology and pedagogical theory as well. It has added novelty and vitality to classroom teaching by ensuring students' active participation. Likewise, Chapelle (2003) talks about the benefits of using ICT in English language teaching. He further says it creates a learner friendly environment, helps to improve all four language skills, provides varied communicative opportunities for students within and outside the class, increases students' self-confidence and makes learning more stimulating, productive and student-centered. Similarly (UNESCO, 2009) reports says ICT was expected to lead to more productive learning. ICT on educational outcomes did not produce very consistent results. It is believed that the use of ICT in education can increase.

### **Challenges of ICT Integration**

The world today is known as the age of information and communication technology. The developments in technology are the core of 21st century innovations. There is no doubt integrating ICT in language learning is very effective. At the same time there are many challenges which affect the integration of technology into language learning. This is because of the difference in age, learning styles, perceptions, attitudes and others which the person holds. Several researchers have been conducted on barriers of using ICT in education as explained by T4:

*Teachers like me encounter several obstacles in employing ICT in language classrooms. Some of them are the lack of confidence, motivation, technical knowledge and making access of ICT to all the students in English language learning and teaching.*

Teachers reported some of the challenges, such as lack of their confidence, intrinsic motivation; skills, and knowledge as demonstrated by Paudel (2023). Similarly, Hara (1998) identified a range of factors which are barriers of using ICT in education in his research 'student's perspectives in a web based distance education courses'. Those factors are self-confidence with ICT self-efficacy and prior educational background. Richmond (2002) indicates that learning about computers and the Internet focuses on developing technological literacy. These skills are the basic for English language teacher. If a teacher does not have such skills, he or she becomes illiterate in technology. Muilenberg (2001) investigated analytic studies of barriers to online learning. He identified eight underlying constructs that limit student's experience of online education. These barriers are administrative and instructor issues, limitations of social interactions, limited academic and technical skills, learner motivation, and support for studies, high cost and limited access to the technical problems.

## **Conclusion**

Since this study aimed to explore practice, opportunities and challenges of ICT integration in English language teaching, seven English language teachers from Rupandehi district were purposively selected. As a qualitative study, data were collected through semi-structured interviews. The study concludes that the integration of ICT in EFL classroom is essential for language teachers. It makes teaching-learning more interactive and interesting. It motivates the students and makes the lessons goal-oriented. It also integrates four language skills for effective learning. Language teaching with ICT integration brings a significant change in EFL classroom. ICT helps the teachers and students make their classes more interesting and interactive. They use ICT to prepare teaching materials, to plan lessons, and assess students. ICT helps the teachers be up to date with recent innovation and new trends of teaching, making the classroom teaching more practical and sustainable. It helps the teachers and students collaborate and interact to each other, fostering students' creativity, logical power and critical thinking strategy. ICT generates motivation, enthusiasm, and readiness and avoids monotony in teaching learning activity. It promotes higher order thinking to evaluate the knowledge and skills.

There are various ICT tools, such as mobile, laptop, iPod, internet, email, and social media apps that integrate with teaching methodology. Teachers face several challenges of using ICT in the classrooms. Some of them are the lack of confidence, lack of motivation, lack of technical knowledge and making access of ICT to all the students in English language learning and teaching. To overcome such challenges, teachers should be provided professional development training from academic institutions and other authorities. As a qualitative study, this research may not cover all aspects of this domain. So, a mixed research needs to be studied to investigate all aspects of ICT integration in EFL classrooms.

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