



Teachers' Perceived Value of Integrating ICT in Transposing English Language Teaching in Nepal

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Abstract

In the evolving landscape of English Language Teaching (ELT), the integration of Information and Communication Technology (ICT) has emerged as a fundamental pedagogical approach. This research delves into the perceptions and value attributed by teachers in Nepal towards the incorporation of ICT tools and methodologies in their teaching practices. I have used content analysis method to gather the related field of studies and analysed the data. Findings indicate that significant challenges such as limited technology access, lack of trainings, administrative support, over-load of unnecessary paper-work cause major obstacles in transposing ICT in classroom. However, ICT also offers great opportunities to transfer the traditional teaching practices, develop ICT skills, access to vast source of information and more importantly, the potential era for a paradigm shifts in the recent practices. The study emphasizes the need for a strategic approach, including investment in technology infrastructure, teacher training and supportive policy environment, to enhance ICT integration in ELT classrooms. In addition, the study provides valuable insights for policy makers, educators, researchers, and other stakeholders in their efforts to integrate ICT in teaching and learning in Nepal. Most importantly, this research contributes to the escalating discourse on ICT integration in ELT by providing nuanced insights grounded in the Nepalese context. The findings advocate for a holistic approach encompassing infrastructural development, targeted professional development initiatives, and transformative pedagogical strategies to optimize the potential benefits of ICT in transposing English language teaching practices in Nepal.

Keywords: ICT integration, transformative learning, digital pedagogy, Teachers' readiness, ELT



Introduction

The rapid development of Information and Communication Technology (ICT) has had a profound impact on many aspects of our lives, including business, law, finance, entertainment, and healthcare, changing the way we work, learn, play, and interact with each other (Salas-Pilco & Yang, 2022). Education is no exception as it plays a crucial role in shaping the society. In a study, Dhital (2018) reported that utilizing ICT in education has the potential to improve essential skills like reading, writing, math, and science, while also motivating and empowering students to actively participate in their own learning journey and assume greater responsibility for it. According to a report of NTA (2021), 91.5% Nepali people have access to the Internet. This demonstrates the notable advancements Nepal has achieved in the field of ICT. In recent times, the government of Nepal has acknowledged the significance of ICT in education and has taken steps to incorporate it into the teaching and learning process. By embracing ICT and its educational impact, Nepal is striving to embrace progressive teaching methodologies and transition from traditional instruction to a more ICT-oriented approach (Rana et al., 2018). However, the implementation of ICT in education faces numerous challenges in Nepal, including limited access to technology, inadequate infrastructure, resources and a lack of trained teachers (Devkota et al., 2021).

It is undeniable fact that, computers are doing wonders since their invention. Every field of work needs a computer in our day-to-day work these days for transportation, offices, industries, research, education and the list go on the vast area. Though only a dream a while ago, ICT has become a reality, being now part of our routines and prevailing every walk of our lives, including teaching and learning (Goksel & Bozkurt, 2019). When educational technologies are used in classrooms, human teachers play a pertinent role in delivering their knowledge. Use of digital tools has aroused an assumption that enhanced teacher awareness will lead to improved teaching, and consequently, to improve student's outcomes in the long run (Holstein et al., 2018). This era is driven by the rapid rate of innovation in information and communication technology (ICT) and the creation of new and growing cyber networks, which in turn, serve as catalysts in the knowledge revolution that promises to affect virtually every aspect of life in the future (Santhi et al., 2002).

However, a common mind-set is that ICT cannot address the emotion, feeling, motivational part of learner which a human teacher can do in solving many of the problems in classroom. Yet ICT is not typically designed to work together with teachers, in real-time, to take advantage of these complementary strengths ICT might be even more effective if they were designed not only to support students directly,

but also to amplify teachers' abilities to help their students (Holstein et al., 2018).

The Constitution of Nepal 2015 has made a clear provision regarding education as a fundamental right. The Government of Nepal, Ministry of Education Science and Technology has adopted various strategies in order to achieve the goal of education. ICT is regarded as one of the key factors to achieve the broader goal of education. The government policy documents such as , ICT Master Plan (2013), Digital Nepal Framework (2015), National Curriculum Framework (2007) have envisioned for expanding ICT assisted teaching learning process in all schools of Nepal. Furthermore, the government of Nepal has endorsed a program of “Digital Nepal Framework, 2019” which is to be implemented in five years, with the vision of ‘digital Nepal for good governance, development and prosperity. According to this framework, The Digital Nepal Task in Education claims to prepare human capital to embrace new economic opportunities by introducing improved coaching and learning environments. This entails using digital technology to support teaching, enhance the learning experience, and enhance academic outcomes (Giri, 2018). UNESCO (2019) highlighted the three areas to show the connection between ICT and education: Learning with ICT (such as using ICT-powered tools in classrooms), learning about ICT (its technologies and techniques), and preparing for ICT (such as helping all citizens better understand the potential impact of ICT on human lives). However, only students from cities and urban areas have access to ICT but the students from remote areas are deprived of these technologies which ultimately creates digital divide (ICT Master Plan, 2013).

Literature Review

Teachers' Readiness in Augmenting ICT in Classroom

Several Studies have been carried out on ICT skills and its role to properly use tools, devices and applications throughout the globe along with the development and advancement of Information and technology. In the context of Switzerland, Petko et al. (2018) reported that the proactive readiness of the teacher supported to integrate ICT technology in education. Similar case of Africa, Sanusi et al. (2022) highlighted five general areas of preconceptions regarding teacher skills: assisting students with technical knowledge, possessing conceptual understanding, prioritizing professional development strategies, contextualizing teaching resources and tools, and promoting sustainability in achieving development objectives. Similarly, a study on essence of teachers' education program to develop technical skills by Vazhayil et al. (2019) reported in the Indian context that the use of ICT reduces the workload of teachers and saves time so that they can use it for more creative works. According

to Ryu and Han (2018) teachers with experience in leading schools recognized that ICT education would help to improve creativity of the students. Likewise, a study by Kaarakainen et al. (2018) on students and teachers' ICT skills in Finnish schools concluded that ICT skills can be learned by using social media, playing mobile games, seeking information, and surfing the Internet.

However, the existing research has also indicated that despite the evident advantages entailed in the use of ICT in the teaching-learning process there is also a growing concern among the society with the implications and risks of the use of this technology (Sánchez-Prieto et al., 2019). These international literatures also suggest that teachers necessitate willingness and aware about the use of emerging technologies to use in classroom.

Capacitating Teachers in ICT

A study in Nepal by Rana and Rana (2020) revealed that teachers were experiencing various challenges such as proper trainings and ICT infrastructures to integrate ICT in classroom They also reported that teachers had strong will power to develop their ICT skills to imply in their teaching and learning activities. In a similar study, Khadka (2021) concluded that despite sufficient skills and knowledge to use ICT tools and application, teachers' high motivation guided them to gradual shift for integration of ICT in English language teaching. Moreover, a study by Rana et al. (2018) reported that the incorporation of inclusive digital tools into teaching and learning activities has partially transformed the role of teachers in the classroom, fostering a conducive learning environment and improving the overall classroom dynamics.

However, the study revealed a lack of access to ICT resources for teachers, including inadequate provision for ICT training in both pre-service and in-service programs to develop teachers' ICT skills. In a similar study Thapaliya (2014), suggested that ICT made both teachers and learners easy to learn, aroused students' motivation and provided authentic learning materials by fostering entertaining learning activities, and reduced the cultural gap between the first language and the target language.. Moreover, Dhital (2018) highlighted how ICT can be used to enhance the quality of government school of Nepal. He further emphasized that there are some hassles like, lack of skilled teachers, hardware, software, electricity as well as poor implementation strategies for implementation in schools.

Integrating ICT in Teaching and Learning

ICT has the potential to transform education in a number of ways as it has been widely applied in education, particularly by educational institutions to

perform administrative functions, teaching- learning activities, students' assessment, curriculum customization based on students' needs which improves learning achievement overall. Furthermore, the use of ICT has allowed instructors to carry out their duties independently or with assistance from other technologies such as embedded computer systems (Chen et al., 2020). For instance, using automation in official work could reduce the amount of time in updating various data. Similarly, it can be used to give feedback on students assignments during the course, and increase exam grades when used in a regular basis (Vittorini et al., 2021). Furthermore, a recent study on the role of ICT in education by Zafari et al. (2022) revealed that rapid spread of digital tools offered an opportunity to be an autonomous learner in shaping their personal skills, knowledge, and qualifications for competitive job market.

However, a study by Kabudi et al. (2021) reported on specific student needs or problems faced by many learners and improvement of users' experiences with educational platforms. Moreover, similar study on Augmenting classrooms with ICT by Kokku et al. (2018) suggest that Intelligent Tutoring Systems (ITS) can be used to augment traditional teaching in order to improve student engagement and learning outcomes. ITSs are complex systems, which integrate technologies such as interactivity, dialogues, automated question generation and learning analytics. However, a study by Felix (2020) strongly argues that the excessive use of digital tools might reduce the potential factor of the students as it avails lots of information they wish to find at a single click to do their homework or assignments.

ICT for Collaborative Learning

The studies in the field of ICT has found that there has been growing interest in exploring how ICT, being perceived as a valuable resource for tackling challenging issues, can be harnessed to enhance students learning in computer-supported collaborative learning. For example, Tan et al. (2022) revealed that ICT based technology not only facilitates learners' interaction but also provides support for more effective meaningful learning experiences. Similarly, Moore et al. (2019) reported that ICT helped the teachers in forming learners' groups, scaffolds learners in performing the tasks in group interactively. Additionally, teachers have used ICT tools to navigate learners' ideas and creating collaborative learning environments (Järvelä et al., 2020; Lee, 2021).

In Spanish context, Rodríguez et al. (2017) found that ICT offers various AI tools and avenues that have significantly expanded the potential for collaborative tasks, ensuring high-quality interaction and communication. They further reported that ICT tools made teacher-teacher, learner-learner, teacher-learner, teacher-parents interaction easier that eventually led to successful learning. Likewise,

Roschelle (2021) reveals that ICT tools have the potentiality to create well-balanced student groups for efficient tasks completion by assessing each student's level of collaboration through extensive data analysis. He further emphasizes, ICT has been used to develop virtual agents to support learners during group tasks and it can also monitor the participation of students in group activities. Similarly, Jeong and Hmelo-Silver (2016) found that technology provides learners with various opportunities to enhance their education and collaborative learning experiences. The study further suggested that learners can participate in joint tasks, interact effectively, share learning resources, engage themselves in collaborative processes, co-construct knowledge, monitor and regulate their collaborative efforts and form groups and learning communities to scaffold their learning.

Methods and Procedures

The methodology used in this research was content analysis (Cohen et al., 2018, p. 674) method based on the review of previously published literatures related to research issue. According to Bowen (2009), the analytical procedure encompasses finding, selecting, making meaning and synthesizing data found in the documents. He further noted that the analysis of the document includes skimming, reading and interpretation by combining elements of content analysis and thematic analysis. In this study, a comprehensive search of relevant databases, such as Google Scholar, JSTOR, ProQuest, and also Library Genesis were frequently used. I found the related literature by surfing the issues such as, 'ICT adoption in Nepalese education', 'challenges of ICT in Nepalese education', and 'opportunities of ICT in Nepalese education'. The search was mainly limited to articles published in English related to ICT and pedagogy. Furthermore, the selection of the studies was focused on the challenges and opportunities of ICT adoption in Nepalese education. The data was extracted from the selected studies included information on the challenges and opportunities of ICT adoption in Nepalese education, as well as the initiatives and policies aimed at promoting the integration of ICT in Nepalese education. The data was synthesized and organized into themes as suggested by Braun and Clarke (2006) to provide a comprehensive overview of the literature. I used deductive coding to assemble and maintain the coherence of ideas collected from the literature. Moreover, the quality of the selected studies was assessed using established quality assessment criteria, such as the rigor of the research design and the validity of the findings (Denzin & Lincoln, 2018). The analysis of the literatures provides a comprehensive overview of the challenges and opportunities of ICT integration in ELT classrooms. The review is based on a thorough examination of the available literature and provides a clear and concise summary of the current state of research on ICT adoption in Nepali education.

Results and Discussion

This study aims to explore and understand the perceptions and value that English language teachers in Nepal attribute to the integration of Information and Communication Technology (ICT) in transposing ELT in Nepal. By exploring the existing studies related to the study, I want to delve into the multifaceted dimensions of teachers' experiences, challenges, and opportunities associated with incorporating ICT tools and strategies in English Language Teaching (ELT). The scope of the study encompasses a diverse cohort of educators from various educational settings within Nepal, thereby offering a comprehensive understanding of the contextual factors, pedagogical implications, and transformative potentials of ICT integration in transposing ELT practices.

This section deals with the analysis of the data based on the research questions and several studies done in national and international context with regard to the use of ICT and current states as well as future prospects of ICT in teaching and learning. I have analyzed the data under various themes mainly, the opportunities, challenges and teachers' perceived thought reflected over the period of reviewing the literature.

ICT Adoption and Opportunities

ICT has the capacity to revolutionize education in various ways due to its extensive utilization within educational institutions. These institutions employ ICT for administrative tasks, teaching and learning activities, student assessment, and customizing the curriculum according to individual student requirements, ultimately enhancing overall learning outcomes (Turugare & Rudhumbu, 2020). Similarly, a study in the case of Bangladesh Hoque and Alam (2010) claim that ICT has been helpful to promote access to education, enhance the relevancy to digital workplace, improve quality as well as making interactive classroom in teaching and learning. For example:

... help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life.

Furthermore, study on benefit of ICT Livingstone (2012) reported that the application of ICT improved learning outcomes in a surprising way. It seems that there is connection between the way of learning children learn and the result they improved while using ICT. Another study regarding the new challenges of ICT in education recommended that availability of abundant sources and use of ICT has supported

teachers and students to adopt new practice of teaching outside traditional classroom setting (Enrique Hinostroza, 2018). For example:

... use of ICT in society, in general, is leading teachers and students to use these tools to complement their teaching and learning processes outside the traditional classroom context.

Krumsvik (2006) Highlighted that the revolution of digital technology has offered plentiful possibilities to the vast area of knowledge. According to Turugare and Rudhumbu (2020) ICT has provided a better platform for personal development, professional development, technical support as well as effective technological integration. It is the best means for teachers and learners to gain a new updates information by oneself.

The finding from the literature, in the context of Nepal revealed that the use of ICT tools such as, mobile phones, laptop, multimedia projector, and web tools like You Tube, wiki, Facebook, email, blog brought positive changes in ELT classroom (Acharya, 2014). Likewise, Rana and Rana (2020) reported that ICT has transformed the traditional teacher-centered method into ICT friendly classroom. They further added that ICT is equally helpful means for teachers' professional development. Moreover, a recent study by Devkota et al. (2021) claims that more than 90% of Nepalese teachers are interested for the adaptation and implementation of ICT in teaching and learning. Similarly, Paudyal (2020) highlighted that due to the rapid development of ICT, the culture of teaching and learning has stepped into a new paradigm and it is an opportunity to accelerate technology friendly learning atmosphere by educating learners on 21st century skills, competence in our education institutions.

Challenges of ICT Integration and Support Needed

The analysis of the literature identified a range of shared challenges and support requirements concerning teachers' adoption of ICT in education. The study found that the absence of adequate teacher training, professional development opportunities, and proficiency in integrating ICT into their actual teaching practice posed a significant challenge to the effective integration of ICT in education (Poudel, 2015). Consequently, it will directly influence student-learning outcomes and raise necessity of teachers' training. Similarly, another study by Enrique Hinostroza (2018) argued that lack of digital skills for both teachers and students limits them for the best utilization of it which has negative impact in their learning, and can increase digital divide especially in the developing countries. Furthermore, the study also reported that lack of financial support, limited funding to manage ICT infrastructure, and sustainability for teachers and staff development are the remarkable issues for

integrating ICT in classroom (Turugare & Rudhumbu, 2020). For example:

... due to the resource constraints, lack of trainings and lack of readiness in the administrative systems, they have not been able to make use of ICTs in classroom instruction.

The data reveals that the effective implementation of ICT in classroom solely depends on the will power of school leaders such SMC chairperson, headteachers, and local bodies who can execute their decision and the role of teacher is to transfer those skills and knowledge to the students in a real classroom life situation. However, the unequal distribution of the resources to the students has caused serious demarcation among students in the urban and rural areas particularly in the case of Nepal and other developing countries.

... lack the digital skills needed to make effective use of these tools; which limits their potential impact, can have negative consequences for students' learning, and can increase educational inequalities, especially in developing countries.

Despite these, access to technology and adequate infrastructure, such as computers and internet connectivity, skilled human resources, and also the maintenance of technical issues influences the integration of ICT at school (Ramorola, 2013). In many cases, schools and teachers lack the necessary resources to effectively integrate technology into their teaching practices. Laudari and Maher (2019) claimed that lack of skills and affordability to manage personal technological resources, students can not complete their assigned task and teachers also faces difficulties most often in real life situations for the integration of ICT. For example:

(...) unavailable technology policy, insufficient technology equipment, a lack of teachers qualified in technology integration, and maintenance and technical problems as the major challenges affecting the effective integration of technology.

The studies in the case of Saudi Arabia, revealed that many teachers face time constraints, such as a heavy workload and limited planning time, which can make it difficult to effectively integrate technology into their teaching practices (Al Mulhim, 2014). Likewise, the literature revealed that support from school leadership is crucial for the successful integration of ICT in education (Alemu, 2015; Poudel, 2015). They further added that, school leaders can provide the resources, infrastructure, and support necessary for effective ICT integration. They can also provide teachers with the professional development opportunities. Most importantly, the study suggested that lack of clear policy and strategy to implement ICT, there is always problem for

funding in ICT integration as well as teachers' professional development (Rana & Rana, 2020). Moreover, the study also suggested that ideological motivation directly influenced the policy and practices in implementation of ICT integration (Shields, 2011).

Teachers' Perceived Values of ICT Integration

Various studies have shown that perceptions of teachers play a crucial role on integration of ICT into classroom teaching. A study in the Malaysian context shows that teachers were contented with the use of spreadsheet, presentation software, internet and email (Singh & Chan, 2014). Similarly, another study found that teachers' perceptions plays crucial role for productive result of ICT integration. (Gebremedhin & Fenta, 2015).. In a Chinese secondary school teachers study Raman and Yamat (2014) reported that around 66.67 percent of teachers were found hesitating to integrate ICT in their teaching and learning and more than 42 percent of them were unable due to overload such as complete their course, prepare for the examinations, and mark students paper in a daily basis. On the other hand, ICT integration is beneficial for students with differently enabled, empowering students soft-skills and also for creating varieties in teaching and learning activities (Regan et al., 2019). Furthermore, the study conducted among teachers about their perceptions revealed that teachers did not use ICT tools for radical transformation of pedagogy but they used it for traditional use as usual (Mwalongo, 2011). Another similar study suggests that majority of the teachers had negative attitude in integrating ICT due to the lack skills to use technology but they were willing to learn (Taghizadeh & Hasani Yourdshahi, 2020). Additionally, the study about perceptions of primary teachers' training on ICT in rural areas of Nepal by Rana et al. (2021) reported that teachers didn't get any ICT related trainings from the government agencies rather non-governmental organizations provided some trainings and also infra-structures in the rural areas.

Conclusion

This study highlights the challenges and opportunities of ICT adoption in various contexts especially in the situation of Nepal in terms of teaching and learning. As has been analyzed in the data, more than 90 % people in Nepal have the access to the Internet. Despite the growing recognition of the potential of ICT to enhance teaching and learning, the adoption and integration of technology in the Nepalese educational system faces several challenges, due to limited access to technology, a lack of investment in infrastructure and teacher training, and a digital divide between urban and rural areas.

However, the research further delves several opportunities for ICT adoption in Nepalese education, such as the potential to improve student engagement and motivation, increase access to quality educational resources, and enhance the skills and competencies needed for the 21st-century workforce. Additionally, there are ongoing efforts to address the challenges and promote the integration of ICT in the Nepalese educational. The provision and promulgation of various national education policies and programs such as, ICT Master Plan (2013), Digital Nepal Framework (2015), National Curriculum Framework (2007), all prioritize technology integration, and the implementation of teacher training programs that focus on technology integration.

Despite the challenges, the study suggests that the future prospects for ICT adoption in Nepalese education are promising. To realize these prospects, it is crucial that policymakers, educators, and other stakeholders need to work together to address the challenges and promote the integration of ICT in the current practices. This may involve investments in infrastructure, teacher training, and the development of policies and programs that support technology integration. Ultimately, the success of ICT adoption in Nepalese education will depend on the ability of stakeholders to collaborate and effectively integrate technology into the educational system in a way that benefits students, teachers, and society as a whole.

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