

Use of ICT for Teaching Nepali Subject

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Abstract

This qualitative study explores the use of Information and Communication Technology (ICT) in teaching the Nepali language at TJMC, focusing on how teachers integrate digital tools and the challenges they face. Findings reveal varied use of ICT, with mobile apps and projectors being common tools to enhance literary comprehension and student engagement. While some teachers use ICT regularly, others face limitations due to inadequate resources and training. The study highlights a significant shortage of quality Nepali digital content and insufficient teacher training as major barriers. Technical issues such as unreliable internet and power cuts also disrupt ICT use. Despite these challenges, most teachers recognize the potential of ICT to make Nepali language teaching more effective and engaging. Platforms like YouTube and Google Slides are frequently used to deliver interactive lessons. The research underscores the need for improved infrastructure, localized digital resources, and continuous professional development to maximize ICT's benefits in Nepali language instruction and transform traditional classrooms into dynamic, learner-centered environments.

Keywords: teacher training, Nepali subject, ICT integration, digital content, student engagement

Introduction

All technologies used to manage broadcast media, telecommunications, intelligent building management systems, audiovisual processing and transmission systems, and network-based control and monitoring tasks are collectively referred to as information and communication technology, or ICT. Although it is now much more difficult to fully understand the meaning of ICT, which is utilized everywhere, we can sum it up as follows: ICT is all about using technology to manage and share information. The digital world is growing, and technology has been instrumental in enabling individuals, companies, and organizations to develop, realise their full potential, grow, and achieve new heights. An essential component of information technology (IT) are computer systems, networking components, software, and applications that facilitate effective and easy communication between humans and machines as well as between humans.

In recent years, Information and Communication Technology has become an essential component of education globally, transforming traditional teaching and learning practices (UNESCO, 2015). The integration of ICT in language education, particularly in teaching the Nepali subject, offers innovative opportunities to make lessons more engaging and interactive. ICT tools such as multimedia projectors, digital videos, audio clips, and online resources support diverse learning styles and help improve students' grammar, pronunciation, and literature comprehension (Mishra & Koehler, 2006).

In Nepalese campuses, the use of ICT in Nepali language teaching is gradually expanding, enabling educators to move beyond conventional rote learning methods toward more learner-centered approaches (Karki, 2019). Multimedia content enriches the classroom environment by providing authentic audio-visual materials that enhance understanding and motivation among students (Adhikari, 2020).

However, despite these benefits, many campuses face challenges including inadequate infrastructure, limited access to appropriate Nepali-language digital resources, unreliable internet connectivity, and insufficient teacher training (MOEST, 2016). These factors hinder the full utilization of ICT's potential in enhancing Nepali language education.

Information and Communication Technology play a vital role in enhancing the quality and effectiveness of the teaching-learning process. ICT tools help teachers deliver content more interactively, enable students to access vast resources online, support collaborative learning, and facilitate self-paced learning. It transforms traditional teacher-centered classrooms into more dynamic and learner-centered environments. "ICT can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development, and more efficient education management, governance and administration" (UNESCO, 2009).

Statement of the Problem

1. There is a shortage of quality digital resources in the Nepali language (e.g., grammar videos, e-books, interactive lessons), making ICT use less effective.
2. Many campuses have limited access to computers, projectors, internet, and other essential technologies.
3. Most teachers have not received practical or subject-specific ICT training to integrate technology confidently into Nepali instruction.
4. Frequent power cuts and poor internet connectivity hinder regular use of ICT tools during lessons.

5. There is insufficient support from campuses and education authorities to promote ICT-based Nepali language teaching.

Objectives of the Study

The main objective of this research was to explore how teachers use ICT tools and digital content in teaching the Nepali subject and to identify challenges faced by teachers in integrating ICT in Nepali language instruction.

Literature Review

The integration of Information and Communication Technology (ICT) in education has been recognized as a crucial step toward modernizing teaching methodologies and improving learning outcomes (UNESCO, 2015). In language education, ICT offers multimedia resources such as videos, audio clips, and interactive applications, which support the development of students' language skills, including grammar, pronunciation, and literature appreciation (Mishra & Koehler, 2006). These tools provide a multimodal learning environment that caters to different learner preferences and fosters greater engagement (Adhikari, 2020).

In the context of Nepali language instruction, ICT adoption in campuses is a relatively recent phenomenon but shows promising potential. Karki (2019) found that Nepali language teachers who use digital content and multimedia tools observe increased student motivation and better comprehension of complex grammatical structures and literary texts. Similarly, Shrestha (2018) reported that the use of audio-visual aids in Nepali language classrooms enhances students' pronunciation and listening skills, which are often difficult to develop through traditional methods alone.

Despite these benefits, several studies highlight persistent challenges in the Nepalese education system related to ICT integration. The Ministry of Education, Science and Technology (MOEST, 2016) identified infrastructural limitations such as unreliable electricity supply, slow internet connectivity, and insufficient digital resources in the Nepali language as significant barriers. Moreover, Koirala (2020) emphasized the lack of adequate teacher training tailored to subject-specific ICT use as a critical obstacle that affects the effective implementation of technology in language education.

Content scarcity is another major issue. According to Bhattarai (2019), most available digital materials are developed for English language teaching, leaving a considerable gap in quality Nepali-language multimedia resources that align with the curriculum. This lack

restricts teachers' ability to fully exploit ICT tools and limits students' exposure to culturally relevant content.

The integration of Information and Communication Technology (ICT) in education has transformed traditional teaching methods into interactive and learner-centered approaches. The theoretical foundation for the use of ICT in teaching is grounded in various learning theories, notably constructivism, cognitive learning theory, and sociocultural theory, which emphasize active engagement, knowledge construction, and the role of social interaction in learning.

According to Vygotsky's Sociocultural Theory, learning occurs through interaction and collaboration with others, and tools such as language and ICT serve as mediators in the learning process. ICT tools like multimedia presentations, language learning apps, and interactive digital texts provide Nepali language learners with opportunities to engage in collaborative learning environments, thus enhancing comprehension and expression (Vygotsky, 1978).

Constructivist theories, particularly those influenced by Piaget and Bruner, argue that learners build their own understanding based on experiences. ICT-based instruction in Nepali allows students to actively participate in constructing meaning through activities such as digital storytelling, audio-visual interpretation of texts, and online discussions. This aligns with Bruner's emphasis on discovery learning and scaffolding (Bruner, 1966).

Furthermore, the Cognitive Load Theory (Sweller, 1988) highlights how multimedia use in language teaching can reduce extraneous cognitive load by presenting information through both visual and auditory channels. In the context of teaching Nepali, well-designed ICT tools can support vocabulary development, listening skills, and reading comprehension through multimodal inputs.

Studies have shown that ICT-enhanced language teaching fosters learner motivation, engagement, and autonomy. For example, UNESCO (2009) emphasizes that ICT improves the quality of education by making the learning process more dynamic and accessible. Likewise, Higgins (2003) asserts that technology, when integrated meaningfully, can lead to better learning outcomes and deeper understanding in language subjects.

Research Method

This research followed a qualitative method to understand how teachers use ICT in teaching Nepali subject. This study was conducted with five teachers, who were selected

through purposive sampling .Data were gathered using semi-structured interview and Multiple choice questions, allowing teachers to share their ideas freely.

Findings and Discussion

Use ICT tools and digital content in teaching the Nepali subject

Most Frequently Use

Responses from five participants in a qualitative study of instructors' use of ICT tools for teaching Nepali showed differing degrees of technology involvement. Lesson planning, content distribution, and student engagement are increasingly dependent on readily available, user-friendly platforms, as seen by the three respondents who said they used mobile apps. Particularly in situations where sophisticated infrastructure is scarce, mobile apps may offer the flexibility and interactive materials needed to enhance language learning in the classroom.

However, two educators indicated that they preferred to use projectors to improve students' understanding, especially when presenting stories, poems, or grammatical explanations. This demonstrates that although projectors and other classic ICT tools are still useful, they might not be as flexible as mobile technologies. Two respondents additionally mentioned using laptops or desktops, most likely for accessing online content, creating teaching materials, or taking digital tests. This emphasises the significance of these devices as content creation tools rather than in-class teaching aids.

Main Purpose for Using ICT Tools

A focus on improving literary comprehension using digital methods is evident in this qualitative analysis, as the majority of respondents (4 out of 5) mostly deliver poems and literary texts using ICT technologies. This implies that educators appreciate ICT because it makes difficult or abstract literature easier to understand. In an attempt to provide captivating, multimodal learning experiences, two responders display films and audios using ICT. Limited utilization of digital evaluation tools is indicated by the fact that only one respondent mentioned using ICT for online assessments. Overall, the results demonstrate that in Nepali language instruction, ICT is primarily utilized to assist with content delivery rather than assessment.

Time Spent Using ICT Tools

Two of the five instructors who participated in this qualitative study said they used ICT tools in every class, indicating a strong commitment to regularly incorporating technology into Nepali instruction. This implies that these educators are aware of how regular ICT use might improve student comprehension and engagement. However, three respondents

said they only infrequently utilize ICT tools, which could be a result of issues such a lack of resources, time restraints, or different levels of technological comfort. All things considered, although some instructors use ICT on a regular basis, the majority use sometimes, underscoring the need for improved assistance and training to encourage more frequent use in Nepali classrooms.

Access to Digital Content

Among the respondents, four teachers primarily sourced digital content from the internet, highlighting the increasing dependence on online resources for teaching Nepali. This indicates teachers' proactive approach to accessing diverse and up-to-date materials to enrich their lessons. Meanwhile, one teacher relied on content provided by their school or college, showing institutional support in supplying digital resources. Interestingly, one respondent reported self-creating digital content, reflecting creativity and customization to meet specific classroom needs. No respondents avoided using digital content, which emphasizes the growing integration of technology in Nepali language instruction and teachers' commitment to enhancing student learning through varied digital materials.

Most Used Digital Platform

YouTube and Google Slides/Docs were both utilized by three respondents in the qualitative study of the use of digital platforms for teaching Nepali, indicating their widespread use for obtaining and distributing dynamic and adaptable content. YouTube is helpful for poetry, storytelling, and pronunciation, and it facilitates audio-visual learning. Google technologies let teachers work with students and build and share personalized lessons. Since only one teacher used E-Pustakalaya, there may not have been much awareness or availability. There was no complete avoidance of digital platforms, indicating a trend in favor of ICT integration. The choice for Google and YouTube technologies suggests that Nepali language instruction combines user-friendliness with substantial material.

Students Respond to the Use of ICT in the Classroom

Three teachers who participated in a qualitative study of five respondents noted that when ICT was utilized in the classroom, pupils were highly engaged and excited. This shows that using ICT tools to study Nepali can greatly increase motivation and engagement. Two educators expressed a modest level of interest, suggesting that although students might value digital technologies, their level of involvement varies according to the usefulness of the tools or the material. All things considered, these results demonstrate how ICT enhances student engagement and educational opportunities.

Challenges faced by teachers in integrating ICT in Nepali language instruction.***Barrier to using ICT Tools***

Based on the responses of the five participants in the qualitative study, it is evident that the most significant barrier to using ICT tools in teaching the Nepali subject varies among teachers but centers around common themes. Among the respondents, two teachers identified "lack of ICT training" as their main challenge. These teachers emphasized that despite having access to some digital tools, they struggled to use them effectively due to insufficient training and support. This highlights the need for ongoing professional development tailored to ICT integration, especially for language instruction.

On the other hand, three respondents selected "unavailability of Nepali digital content" as the key barrier. These teachers expressed concern that while infrastructure and basic training might be present, the lack of high-quality, curriculum-relevant digital resources in the Nepali language makes it difficult to fully utilize ICT in teaching. This indicates a gap in localized content development and suggests a strong demand for digital materials that reflect the linguistic and cultural context of Nepali classrooms.

Availability of Digital Content

In a qualitative analysis of the responses, the availability of digital content in the Nepali language is perceived as limited. Among the participants, one person rated it as "Excellent" and another as "Satisfactory", showing some level of satisfaction. However, two participants rated it as "Poor" and one as "Very Poor", indicating a general concern about accessibility and quality of Nepali-language digital resources. This suggests that while some users find the content adequate, a majority feel that the digital materials in Nepali are insufficient or not easily accessible. Therefore, there is a clear need for improvement and investment in localized content.

Training on Integrating ICT

Responses from participants in this qualitative study about training on using ICT into Nepali instruction reveal a range of experiences. There appears to be some institutional support for ICT use, since one individual reported receiving regular formal training. Only one or two training sessions were reported by three respondents, indicating little exposure to organised learning opportunities. Due to a lack of official training choices and possibly personal effort, two respondents described themselves as self-taught. The successful use of technology in Nepali instruction may be impacted by this dispersion, which shows a lack of continuous professional development in ICT integration. Overall, the results point to the necessity of more thorough and continuous teacher training programs.

Technical Issues

In this analysis of technical issues affecting ICT use, responses indicate varying frequencies of problems. Only one person reported that technical issues often disrupt their ICT activities, while three individuals experience such problems sometimes. Additionally, one respondent rarely encounters technical difficulties. This suggests that while most users face occasional interruptions, only a minority experience frequent disruptions. The findings highlight the inconsistent impact of technical challenges like internet instability, power outages, or software malfunctions on ICT usage.

Believe that Teaching is more Effective

Responses to this study show a favorable attitude towards the use of ICT in Nepali language instruction. Two participants had a strong belief that ICT may improve the efficacy of teaching Nepali, demonstrating their faith in the potential of technology to improve learning outcomes. Two more individuals somewhat agreed, indicating cautious optimism but perhaps acknowledging certain constraints or difficulties. While noting the need for proper integration and teacher preparedness to optimize its effectiveness, this mix of high and moderate agreement demonstrates a common opinion that ICT has potential benefits for language instruction, such as interactive content and multimedia accompaniment.

Conclusion

This study concludes that Information and Communication Technology (ICT) holds significant potential in enhancing the teaching and learning of the Nepali subject. Teachers largely view ICT as a tool that improves student engagement, comprehension, and interest—especially when delivering literary content. Widely used platforms like YouTube and Google Docs offer accessible, user-friendly resources that align with modern teaching needs. However, the integration of ICT faces several challenges, including inadequate infrastructure, limited availability of quality Nepali digital content, lack of regular teacher training, and recurring technical issues. Although some teachers use ICT regularly and effectively, most adopt it occasionally due to these limitations. The findings underscore the urgent need for localized digital content development, continuous professional development, and infrastructural improvements. With proper support, ICT can transform traditional Nepali language instruction into a dynamic, learner-centered process, promoting deeper understanding and more meaningful learning outcomes for students across Nepalese campuses.

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