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Teaching and Learning Experiences Through ICT: A Case Study of Sukuna Multiple Campus

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Dharma Kumari Kalakheti

Sukuna Multiple Campus, Sundarharaincha, Morang, Nepal

Sukuna Secondary School, Sundarharaicha, Morang, Nepal

saritabhandari152@gmail.com

Abstract

This study explores the teaching learning experiences of ICT use and practical issues associated with the technology. Using survey and interview methods (a mixed-methods approach) carried out with 74 randomly sampled students and 7 purposively sampled teachers from the research site, the study was accomplished. The study revealed that despite the students' positive response to the use of ICT, the complaints they suggested were teachers sue text materials, copied and screenshots materials and teacher reluctance in the use of ICT in the classroom. The complaints were justified even by the teachers' information, resulting to the negative growth of the impression towards the teachers due to the teachers' lack of creativity and poorly trained ICT-based class performance. The teachers' information, on the other hand, suggested practical reasons of difficulty and issues of using ICT, such as availability of devices and skills required in the subjects -mathematical and numerical subject areas, 'students' disciplinary problems of motivation and students' class bunk', and occasional 'creation of awkward/deadening situations due to the sudden electric power cut-off '. Therefore, the study suggests for improving both professional and administrative mechanisms for: timely

device updates, making available of the devices and dedicated internet access for students, providing meaningful ICT training for teachers in specific subject areas; and even providing training to the students for ethical use of ICT to address the motivational and disciplinary issues raised in this study.

Keywords: ICT, Classroom, Technology, Interactive, e-learning, digital literacy

Introduction

Information Communication Technology (ICT) is everywhere these days. It refers to a “diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information” (Tinio, 2003, p.4). ICT technologies include devices such as computers, the Internet, broadcasting technologies, and telephony (Tinio, 2003). It also includes software, networks, satellite links, and related systems that enable people to access and share information and knowledge in various forms (Ghavifekr & Rosdy, 2015). Moreover, various services and applications, such as videoconferencing and distance learning, fall under the umbrella term ICT (Kumar, 2008).

In educational institutions such as colleges and universities, information and communications technology (ICT) has been gaining prominence as a learning tool (Gil-Flores, Rodríguez-Santero, & Torres-Gordillo, 2017). Therefore, educational systems have sought to increase the availability of computers and internet connections in classrooms as efficient tools for study, valuable sources of information, and useful supports for teaching. An internet connection enables access to information and resources available on educational platforms (Gil-Flores et al., 2017). Then, ICT has been a means of making information available. Earlier, one had to wait for newspapers to get information from around the world. It extends human capacity and expands the social environment of supporting learning (Huang, 2019). Nowadays, classes have become more sophisticated due to the use of advanced technological tools. At the same time, teachers are expected to use the technological tools appropriately.

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Educational Context of ICT Use

In the broader context of ICT use in the classroom, Sukuna Multiple Campus (SMC) has made ICT devices available to make higher education classes more effective and creative, meeting educational goals (SMC, 2024, SMC, 2025, SMC, 2026). In most of the classrooms (but not all), multimedia (MM) projectors are set up, internet connection ports are created in the classroom (SMC, 2024, SMC, 2025, SMC, 2026), and almost all teachers (but not all) are supported financially for purchasing laptop computers (SMC, 2024, SMC, 2025, SMC, 2026). However, the availability of ICT should not be the end of effectiveness and performance. To ensure quality performance, issues such as teaching and learning culture with the use of ICT, despite the policy and provision (Joshi, 2017; Rana & Rana, 2020), are emerging. Therefore, revisiting the use and effectiveness of ICT at the implementation level has been an issue for systematic study. The study has attempted to address the same fundamental issue with the research questions: (a) How are teachers using ICT in the classroom? (b) What is student-teacher responses to the current use of ICT in the classroom? and (c) How can ICT use be made effective/innovative? Essentially, this study will be significant to the Sukuna Multiple Campus principally for decision-making, providing a baseline for future researchers and informing the policy-making process regarding ICT-enhanced programs.

The significance of ICT use in classrooms has been highlighted in several studies, in which teachers are the primary agents in using these tools. Therefore, the teachers are also called educational technologists. According to Huang (2019), teachers are persons to use the technological tools, system administrator responsible for managing and supporting an education system, content management system, learning management system, and/or a network environment used to support learning and instruction, and developer/programmer such as responsible for coding instructionally related software and/or developing mediated objects and resources to be used in support of learning and instruction. Likewise, Nikolopoulou's (2018) exploration of the Kalakheti (2026). Teaching and Learning . . .

requirement for a link between creativity and ICT tools states that the use of ICT tools helped (rather than hindered) their creativity. The significance of ICT use has been further highlighted by its support for daily life activities and, in the field of education, by its support for the teaching-learning process, making it effective, high-quality, advanced, and fruitful (Joshi, 2017). The use of ICT has also been considered a fundamental obligation for work in the 21st century (UNESCO, 2014; Joshi, 2017). Moreover, ICT plays several roles in education, including educational, cultural, social, professional, and administrative (Hepp et al., 2004), and it has integrated several streams into our daily lives (Geneva Plan of Action, 2003).

In their study on the use of ICT, Bauer & Kenton (2005) found that teachers did not integrate ICT tools into their teaching due to insufficient skills and a lack of innovation. In another study, Rana and Rana (2020) have also raised the issue of ICT integration in teaching and learning. In the same vein, Reynolds, Treharne & Tripp (2003) also pointed out the teachers' problems in the adoption of ICT. Thorvaldsen et al (2012) studied the teachers' views of highly achieving ninth-grade mathematics classes in Norway. The findings show that teacher-guided student activity affects the use of ICT. Similarly, Nikolopoulou (2018) explored the link between creativity and ICT tools in school education, finding that the use of ICT tools helped (rather than hindered) creativity. A bibliographical review by Carrión-Martínez et al. (2020) on Information and Communications Technologies (ICTs) in Education for Sustainable Development aimed to synthesize the scientific evidence on the use of ICTs for Sustainable Development. The results showed that the most widely used strategies are mobile learning and distance education. Štemberger and Konrad (2021) studied Slovenian student teachers' attitudes towards using digital technologies in education; their self-reported proficiency in using digital technologies reflected the ICT attitude dimensions such as Teaching and learning, Assessment and critical thinking, empowering learners, and facilitating learners' digital competence. The results showed that Slovenian student Kalakheti (2026). Teaching and Learning . . .

teachers predominantly hold positive attitudes towards the use of digital technologies in education, yet rate themselves as low-level users. Poudel (2022) explored secondary English language teachers' experiences with ICT use in the classroom in the Nepalese context, finding that teachers used ICT tools to monitor students and provide feedback. To him, the training given to the teachers is skill-focused rather than classroom teaching content.

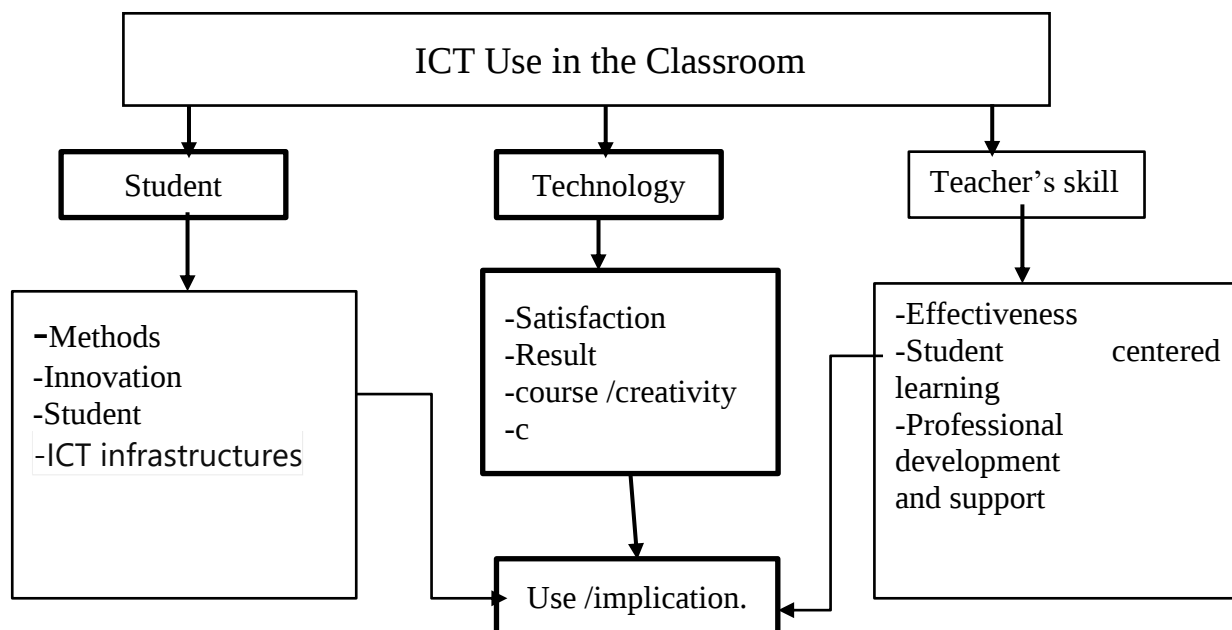
In the practical use of the ICT for teaching and learning, TPACK has been a useful theoretical perspective proposed by Punya Mishra and Koehler(2006) has been used with three major knowledge components-: Content knowledge (CK)- any subject-matter knowledge that a teacher is responsible for teaching; Pedagogical knowledge (PK)- knowledge about a variety of instructional practices, strategies, and methods to promote students' learning; and Technology knowledge (TK)- the teacher knowledge about traditional and new technologies that can be integrated into curriculum (Koehler et.al, 2014). The TPACK framework means that content (what is being taught) and pedagogy (how the teacher imparts that content) must form the foundation for any effective educational technology integration. This order is important because the technology being implemented must communicate the content and support the pedagogy to enhance students' learning experience (Kurt, 2018). Although the framework is proposed, it can be used in our context with appropriate modifications.

Based on the studies and insights from the TPACK framework, several research opportunities have been identified. In the studies, results were multifaceted, including teacher experiences (Poudel, 2022), ICT integration in teaching and learning (Rana & Rana, 2020), attitudes (Štemberger & Konrad, 2021), and Carrión-Martínez et al. (2020) on sustainable development. However, a narrower, in-depth case study of higher education institution-based insights in the local context of a community college, where ICT tools are used for teaching and learning in classrooms, would be a better approach

for performance improvement and for reviewing the institutional investment in this study. Therefore, the exploration of SMC was conceptualized as in Figure 1.

Figure 1

Conceptual framework of the study



Methods and Materials

The issue of how teachers use ICT tools in teaching and how students respond to these practices was the study's major concern. Therefore, this study employed a single-case study design using a mixed-methods approach. Data were collected through surveys with students and teachers to capture broad patterns in the first attempt, followed by semi-structured interviews to gain in-depth insights from purposively selected key teacher and student informants. This triangulation of methods provided a comprehensive understanding of ICT use in the classroom at the sampled college. Two sets of survey questionnaires were developed: one for students and another for teachers.

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The questionnaires were administered via online platforms, and participants were informed both personally and through offline and online communication channels, including Messenger, WhatsApp, and email. In addition, qualitative data were collected through interviews with seven purposively selected teachers. The quantitative data were presented in tables and analyzed, while qualitative data were sequenced, categorized, and presented thematically for analysis, interpretation, and conclusion. From among 250 (of B.Ed., BA, and BBS) students of the target population, the sample size of the study was as stated in Table 1

Table 1

Sample size

Tools/Instruments	Student	Teacher	
Online survey	74 students (35 F+ 39M)	-	Total number of samples = 81
Semi- structured Interview	-	7 interviews	Total number of samples = 81

Results and Discussion

This subsection includes the two main types of study results and the discussion: the use of ICT based on the availability of classroom facilities and the effectiveness of its use, followed by the issues, concerns, and challenges raised by the teachers while using ICT. The information-based results are presented first, followed by discussions.

Use of ICT tools in the classroom

A central concern of the study was exploring the use of ICT materials in the classroom. The question was: "How many classes out of 5 are being run by the teachers using ICT? ". The information received has been presented in Table 1 and analyzed henceforward.

Table 2*Teacher Use of ICT Class-wise*

Classes/ teacher (Per day)	Response	Number of respondents (beneficiaries)	Student beneficiaries in percentage
5	5 out of 5 (fully run)	19	25.7%
5	4 out of 5 (Maximally run)	16	21.6%
5	3 out of 5 (Largely run)	24	32.5%
5	2 out of 5 (Lower use of ICT)	8	10.8%
5	1 out of 5 (Least use of ICT)	5	8.6%
5	0 out of 5 (No use)	2	2.7%

Table 2 presents student responses on teachers' use of ICT in the classroom per day, 'out of 5 classes,' since there were 5 classes allocated to them per day. The data show that 25.7% of students have received the full benefits of ICT in terms of teachers' use, as all teachers use ICT devices in their classes. These students were the beneficiaries of both the availability and use of the ICT in the respective classes. At the opposite end of the continuum, 'No use of ICT' was given to them, and their response indicates that the devices may not be available in the classes, so the teachers are not using them. These students are the deprived group of learners who are denied the benefits of ICT. Likewise, 21.6% of students have benefited from 4 of 5 classes using

ICT, but this is not satisfactory because 1 teacher out of 5 is reluctant to use ICT in the classroom. However, despite the availability of the devices (MM projectors in the classrooms and laptops with the teachers), 32.5% (the largest group in the sampled population) of students have benefited from 3 out of 5 classes using ICT.

The information on ICT uses and student benefits in terms of teachers' use indicates that, despite the campus's claim, students are not equally benefited by the use of ICT in the classroom. A considerable portion of the students are found to be deprived of facilities on campus, signaling potential dissatisfaction or the unexplored dissatisfaction growing among students whose voices are not heard by the campus. So, the unequal distribution of ICT devices and teachers' use has been negatively impacting the campus and students' satisfaction with it.

The second and most significant aspect of the information regarding the use of ICT has been the teachers' reluctance or lack of ICT skills, as the devices available in the classes were not used by the teachers. This result supports the claim by Gil-Flores et al. (2017) that until teachers begin using the technology in innovative pedagogies, the devices are less significant. In the same way, the current result also shows the need, as pointed out by Lomos, Luyten, and Tieck (2023), for ICT to be associated with teachers' ICT-related beliefs, attitudes, and ICT expertise in its implementation. From a TPACK perspective, as defined by Mishra and Koehler (2006), the integration of technology by teachers in their teaching practice is missing. For this reason, teacher training in information and communication technology (ICT) needs to be a guideline for the college.

Infrastructure, management, skills, and intentions in the use of ICT

Two fundamental aspects, infrastructure and skills, were informed factors in the use of ICT in the classroom, as per the information given by the key teacher informants during the unstructured interviews. Fundamentally, although the teachers did not outright reject the students' claim about their use of ICT tools, they supported it to some Kalakheti (2026). Teaching and Learning . . .

extent because the teacher informants were also not satisfied with the current situation of using ICT. However, they differed from the students in many respects. One of the teachers openly stated that he would continue using a board marker and a whiteboard during his teaching. According to his claim, the conventional tools were more useful than the use of a laptop and multimedia (ICT) in the classroom. His objection was to the technical difficulties in the classroom environment and the lack of favorable infrastructure, such as seating, conventional desks and benches, frequent power cuts, and device display problems during class delivery. The information indicates that the integration of ICT in classroom teaching is constrained by infrastructural inadequacies and technical challenges. It also signals the need to evaluate organizational management. Frequent electricity interruptions, unsuitable classroom furniture, and device malfunctions undermine the effectiveness of ICT-based pedagogy. These barriers highlight that successful ICT adoption requires not only teacher readiness but also systemic investment in infrastructure, reliable electricity, and technical support frameworks (Acharya, 2025; Sigdel & Joshi, 2026).

A participant teacher reported that he lacks ICT skills, so he has not been using the tools in the classroom. This signifies a teacher-related barrier to technology integration: a lack of skills and confidence, and an urgent need for training. He claims this is teaching-subject related: *mathematical theorems can be taught better through conventional board and marker rather than the use of technology, such as laptops and MM projectors*. "This conflicts with the use of technology; however, he shares the finding of Billman, Harding, and Engelbrecht (2018), in which many staff members at a large South African University felt that chalkboards were still more suitable than technology for teaching mathematics. This finding supports the idea of a strong subject culture (Billman et al., 2018). To him, *"teaching with technology means copying from books or screenshots or photos of the book contents"*, and it is not effective. The strongest point he accepted aligns with the student's claim that there is a requirement for the creative use of ICT.

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But this understanding is based on a limited understanding of how technology can be used for interactive, creative, and student-centered learning. This belief also highlights resistance to ICT integration stemming from negative experiences or a lack of exposure to innovative uses (Tondeur, 2022). Therefore, this suggests that the teacher has not been trained to use ICT beyond basic content reproduction, and then the teachers feel ICT is ineffective when they lack training in pedagogical integration, not just technical use (Spangenberg & De Freitas, 2019). This indicates the call for continuous professional development (CPD) to support mathematics teachers' effective use of ICTs in the classroom.

Another informant also mentions, *If we do not have an idea to use technology creatively, it is not good to use technology in the name of technology*". This also suggests better use of 'subject-specific tools' such as 'Geozebra' for teaching and learning mathematics and other numerical subjects. The teacher might mean that theorems often involve logical reasoning, proofs, and symbolic manipulation, which can be harder to represent visually or interactively than subjects with more concrete content. However, it doesn't mean ICT is ineffective; it means teachers must carefully select and adapt tools to complement traditional methods, ensuring that technology supports rather than replaces the reasoning process (Hoyle, 2018). Therefore, we cannot reject the use of ICT, even in the teaching of mathematics and other numerical subjects. Research consistently shows that technology cannot replace the logical reasoning central to mathematics, especially in teaching abstract concepts such as theorems. For instance, Campbell and Zelkowski (2020) found that dynamic geometry environments can support students' exploration of proofs, but only when teachers guide learners to connect digital experimentation with formal deductive reasoning. Therefore, the effectiveness depends largely on how teachers integrate them into instruction.

Regarding the use of ICT, complaints have been suggested; among them were the time and administrative issues: *"It takes a lot of time to make ICT materials. 'Subject change' in the routine every academic year discourages me from developing ICT-related materials. According to another mathematics teacher, he lacks good ICT skills and has not received training, so he is not using ICT tools in the classroom. He is*

just using it to make questions for the internal examination run by the campus. The suggestions were principally concerned with skills and management.

Effectiveness of the ICT use in the classroom

The effectiveness of ICT tools in the classroom was another concern of the study. The information collected regarding this concern has been presented in Table 2 and the paragraphs following it.

Table 3

Student Response on Effectiveness of ICT Use

Effectiveness	Number of students	Response in percent	Result in criteria
Very effective	20	27	Effective
Effective	40	54.1	Effective
Less effective	7	9.5	Not effective
Boring/not effective at all	7	9.5	Not effective

Regarding the effectiveness of ICT use in the classroom, respondents were asked, "How effectively are teachers using ICT tools in the classroom?" At this point, most respondents (54.1%) considered the current use of ICT in the classroom 'effective but not very effective', and 27.00% considered it 'very effective'. But around 20% of students (9.5% + 9.5%) reported that classes conducted using ICT tools were less effective (9.6%) or not effective (9.6%) at all, i.e., a boring classroom with the use of ICT. This figure provides crucial information for the institution and teachers regarding the effectiveness of ICT tools in classrooms.

Following the assessment of ICT effectiveness, participants were asked to report on the types of materials the teachers were using in the classroom. Around 48% of respondents reported that teachers were using just text materials. Only 36% of teachers were using

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materials that were really good for them (audio-video and text) in the classroom. This may be the cause of becoming less effective in the classroom, even when using ICT. A considerable number of informants (14%) have reported that teachers are still using manual notes for their students. Likewise, 50% of students have reported that teachers do not use PowerPoint slides when presenting material in the classroom.

Table 4

Teachers' Effective and Creative use of ICT materials

Findings from teacher interview Effective %	Findings from teacher interview Effective %	Creative %	Creative %
Very effective	12.2	Very creative	9.5
Effective	66.2	Creative	56.8
Less effective	13.5	Less creative	24.3
Monotonous	12.2	No creativity at all	9.5

Regarding the effectiveness and creative use of the ICT materials, student respondents were asked questions. In responding to the questions, the majority of the respondents (66.2%) reported that the materials were 'effective', and 12.2 % responded that the materials were 'very effective'. But according to 8% of students, they considered them monotonous, and 12.5% respondents considered the materials less effective. While categorizing them into a negative and positive continuum, combining the negative responses (12.2 and 13.5 regarding the effectiveness of the materials, 26% have negative expressions about the ongoing use of ICT materials. This result signals the need for teacher competency in the material improvement aspect of ICT. Closely related responses have been provided regarding the creative use of ICT materials by

teachers in the classroom, as presented in Table 3, in which around 33% of respondents have responded negatively. Regarding the quality of the materials provided to students in the classroom using ICT, respondents were asked questions. Among the respondents, 36.5% of students reported receiving both Word files and PowerPoint slides for their study, whereas 3% reported finding no materials at all.

Student respondents were asked to provide suggestions to teachers, the campus, and their friends to improve ICT use in the classroom. A few responses include: "*use the ICT materials in every subject, use the audio, text is not enough, provide the materials for the reading, use the materials skillfully; if not, do not use them.*" The information suggests that the students were not satisfied with the teacher's presentation of the solo text materials in the classroom. All the students have said that ICT tools are useful and important, but if not used skillfully, they will do more harm than good. Bingimlas (2009) recognized that ineffective use of ICT can frustrate learners and reinforce negative attitudes. Therefore, teachers are suggested to use the ICT materials skillfully and creatively. This result is not very new in that the process of integrating ICT into class is still a challenge (Pittman & Gaines, 2015), as it has also already been reported that teachers infrequently use ICT in classrooms and laboratories, and the way classes are taught has not been changed by using such resources (Cuban et al., 2001). However, teachers are still the key people who ultimately decide whether to apply ICT in their teaching practice and how to implement it (Ertmer, 2005). Therefore, teachers' skill development has been the center of proper use of ICT in classrooms after infrastructure.

Practical Issues on the Effective Use of ICT

Regarding the effectiveness of ICT use, the information was debatable. One of the teacher informants suggested the occasional use of ICT as a better way, such as for student motivation and providing reading notes and handouts. To him, book photos (Screenshots) are not enough, and technology-oriented, ready-made materials are not better for teaching and learning. In his understanding, "*Lazy teachers copy long*

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theorems and display them once in the classroom, which does not demonstrate the creativity of the teachers. In the same vein, a female teacher in the faculty of management suggested that the balanced use of ICT will make classroom teaching more effective. According to her report, most of the time she uses a whiteboard rather than a laptop and a multimedia projector. She also makes digital materials, but she does not use them all the time in regular classroom teaching. Instead, she uses ICT for providing reading materials. *"ICT use in the classroom has a negative effect rather than a positive one".* In her experience, *students bunked classes when classes were taught using ICT. Therefore, she posts digital notes on Google Classroom for lessons.* This aligns with Kassem (2018) and suggests that the blind application of technology, regardless of content, students' needs, learning styles, and methodology, will cease to be pedagogically effective. The informants have also pointed out the negative impact of ICT use in the classroom.

The second essential component explored for the effective use of ICT was training, as suggested by Sharma (2021), who pointed to the need for more support with the infrastructure and training, especially in rural regions (Sharma, 2021). But in this study, the informants have also suggested that the training be conducted not only for teachers but also for students to create an atmosphere conducive to implementing the tools. Regarding effectiveness and use, a science teacher informant states that he uses laptops and a multimedia projector to create teaching materials. This is another way to use the ICT device, not only in the classroom but also outside the classroom. He emails his materials to the students and uses audio-video and text materials. In his experience, too, students who are too lazy even to draw figures, even when they have to, instead just take photos in the classroom, and the classroom becomes boring. Another significant remark made to other teachers of the informant states, *'will power or motivation has been the main factor; training helps a little.'* To him, *'Those teachers who are favoring the use of white boards instead of the use of MM projectors are an 'escaping strategy'.* This suggests that it is teachers' motivation, rather than students', that matters. Therefore, Kalakhetti (2026). Teaching and Learning . . .

it is concerned not only with the availability of the materials but also with the teacher's readiness to use them. It is also necessary to reshape teachers' beliefs, practices, and approaches to successfully integrate technology into language instruction, as pointed out by Hassan & Mirza (2020). It also does not reject the remark that teachers' belief in ICT as a pedagogical tool and dynamic participation of teachers in creating considerable potential for facilitating the integration of ICT in the classroom (Hassan & Mirza, 2020) are very crucial for learning to take place effectively.

Some teachers who are poor in ICT skills were also found to use other techniques; as one teacher reported, *"most of the time I use mobile, give teaching notes to the student through messenger"* because he cannot prepare digital notes properly. For the effective use of ICT, teachers have pointed out the need for appropriate classroom infrastructure, as there is not a comfortable environment for using ICT tools in classes with conventional desk-bench arrangements. The additional requirements were curtain, light management, and assurance of the regular supply of electricity. As strongly pointed out, the 'electric power cut off' that turned the classes dead was pertinent. Another suggestion for the effective use of ICT in the classroom was teacher skills development to manage learner interests. Teachers admitted some points in making the ICT tools included that the ICT: saves time, is easy to teach, teachers can give complete notes and ideas to the students, along with administrative suggestions such as creating an ICT-friendly atmosphere with regular updates of the tools, and integrating e-learning platforms such as LMS, so that teachers can give tasks and assignments to the students. Counter criticisms were also explored during the interview with the teachers, with a strong belief that the board-marker teaching system should be replaced by digital tools on the one hand, and with a student-oriented emphasis on the ethical use of ICT, such as not allowing them to use ICT for purposes other than learning. The effectiveness of ICT use has also been negatively affected by poor Wi-Fi access for all students, poor internet connectivity, and expensive internet data.

Conclusion

One of the key findings of the study was the lack of uniform availability and use of ICT facilities across classrooms within Sukuna Multiple Campus. From the study, it is known that although most classrooms are equipped with multimedia projectors, a considerable proportion of students reported inadequate access to internet facilities and technological resources, such as multimedia projectors or interactive panelboard. Such unequal distribution of ICT facilities has limited, and even deprived, students of both access to and the effectiveness of technology-enhanced learning, creating disparities in students' learning experiences. It has fundamentally affected the use of ICT and teaching and learning experiences.

A significant aspect explored regarding the use of ICT devices was that students were curious and positive about having information from the teachers' effective use of them. At the same time, the majority of students rated ICT use as effective, but many expressed dissatisfactions with the teachers' excessive reliance on text-based materials and PowerPoint presentations. Nearly half of the respondents reported that teachers primarily used textual materials, whereas only a limited number of teachers integrated audio-visual resources into their lessons. This finding supports the argument of Thorvaldsen et al. (2012), who emphasized that effective ICT integration depends not merely on the availability of technology but on how teachers guide learning activities through technology. Similarly, Nikolopoulou (2018) found that ICT contributes to creativity when it is used in innovative and interactive ways. In the present study, students' concerns regarding monotonous presentations suggest that the creative potential of ICT has not yet been fully realized. Associated with this revelation, a few teachers' reluctance to use ICT has also been noted by the students, which has given rise to negative attitudes towards teachers and teaching and ultimately affects the academic performance and reputation of the institution.

The meeting point of the teachers and the students was found in the effective use of ICT. Students acknowledged the usefulness of ICT but demanded more creative, practical, and interactive classroom practices. Several teachers expressed reservations about the effectiveness of ICT; some accepted it, while others pointed out the challenges to its effective use, particularly in subjects such as mathematics and numerical subjects. At the same time, some teachers preferred conventional board-and-marker teaching and reported difficulties in preparing digital instructional materials. These findings are consistent with Bauer and Kenton (2005), who reported that teachers may possess access to technology yet still hesitate to integrate it effectively into classroom instruction. Likewise, Reynolds, Treharne, and Tripp (2003) highlighted teachers' challenges in adopting ICT despite institutional support. This highlights the requirements of the institutional and managerial support for teaching and learning in association with the ICT.

The interview data also revealed that inadequate ICT skills, lack of subject-specific training, power interruptions, and insufficient classroom infrastructure remain significant barriers to effective ICT integration. Teachers emphasized that preparing quality digital materials requires both technical competence and pedagogical understanding. This observation aligns with the Technological Pedagogical Content Knowledge (TPACK) framework proposed by Mishra and Koehler (2006), which stresses that effective technology integration requires a combination of technological, pedagogical, and content knowledge. The students' recommendations for more engaging digital materials and the teachers' demand for professional training further reinforce the relevance of the TPACK framework in higher education classrooms.

The findings also indicate that ICT use has generated unintended challenges, such as student absenteeism after receiving digital notes, reduced classroom participation (and class bunking), and increased dependence on ready-made learning materials. While ICT provides opportunities for flexible learning, teachers expressed
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concerns about students' declining motivation for independent learning activities.

Poudel (2022) found that ICT use in Nepalese classrooms often focuses on monitoring and content delivery rather than promoting deeper student engagement and creativity.

The findings suggest that ICT integration at Sukuna Multiple Campus is positively viewed by both students and teachers; however, its effectiveness is constrained by infrastructural limitations, inadequate teacher preparation, and limited pedagogical innovation. Therefore, improving ICT-based teaching requires not only technological investment but also continuous professional development, subject-specific ICT training, training to understand learner interests, reducing teacher reluctance and their demands, regular equipment maintenance, and the promotion of interactive and student-centered teaching practices. Orientation for students on the ethical use of ICT, regular updates to devices, and extending ICT platforms to accommodate changes, along with free access to dedicated devices and internet access, would help progress the use of ICT on campus.

Conflict of Interest

The author declares no conflict of interest.

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