EXPERIENCE OF SECONDARY LEVEL ENGLISH LANGUAGE TEACHERS ON INTEGRATING ICT INTO WRITING: A QUALITATIVE STUDY

Manju Basnet

A Dissertation

Submitted to
School of Education

in Partial Fulfillment of the Requirements for the Degree of
Master of Philosophy in English Language Education

Kathmandu University
Dhulikhel, Nepal

July 2026

AN ABSTRACT

of the dissertation of *Manju Basnet* for the degree of *Master of Philosophy in English Language Education* presented on *17 July 2026* entitled *Experience of Secondary Level English Language Teachers on Integrating ICT into Writing: A Qualitative Study.*

APPROVED BY

……..……...	……..……...
Assoc. Prof. Tikaram Poudel, PhD	Asst. Prof. Siddhartha Dhungana, PhD
Dissertation supervisor	Dissertation supervisor

This study explores secondary- level English language teachers' experiences of ICT integration into writing instruction. It aims to investigate how teachers make sense of ICT, how their experiences have shaped their classroom practices, and the factors that have influenced their use of digital technology for writing. I reviewed the relevant literature to achieve my goals, concentrating on themes, empirical research studies, policy documents, and methodological reviews to establish my argument. Following an interpretivist research paradigm, I employed qualitative research study as a research method. To meet the purpose of this research, I collected data from four secondary-level English language teachers who integrate technology into their writing instructions, through semi-structure interviews using an interview guideline and taking field notes. For data analysis, I employed the step-by-step process outlined by Braun and Clarke's (2006), in which eight superordinate themes emerge, each containing two and four subordinate themes, representing all four of my research participants' perceptions of ICT integration and lived experiences.

I followed the Technological Pedagogical Content Knowledge (TPACK) framework and Constructivist Learning Theory to understand, interpret, analyze, and define the phenomena studied in this research. These theoretical perspectives helped me to understand how the teachers developed their technological knowledge through experience, collaboration and reflection, and also how they constructed meaning from their everyday teaching practices. The findings of the study show that teachers'

perceptions of ICT evolve over time and their confidence in integrating ICT into writing instruction continues to grow through continuous learning, classroom experiences, and collaboration with colleagues, despite limited formal training and contextual constraints.

This study contributes to the growing discourse on ICT integration in English language education, particularly in the teaching of writing skills in Nepal, by exploring secondary- level English language teachers' perceptions and lived experiences of using ICT to support writing instruction. By identifying both the opportunities and challenges associated with ICT use, this research advocates for practical initiatives that strengthen teachers' digital competence, improve technological infrastructure, and enhance institutional support for meaningful technology integration. With expanding theoretical insights into teachers' perceptions and experiences of ICT integration from the perspectives of the TPACK framework and Social Constructivist Theory, this study provides viable implications for educators, school leaders, policymakers, and teacher educators seeking to foster effective technology- supportive writing instruction. The findings also aspire future research to explore teachers' evolving experiences of ICT integration across diverse educational settings, thereby contributing to the broader discourse on sustainable and context- responsive technology integration in English Language Education.

…… 17 July 2026

Manju Basnet

Degree Candidate

शोधसार

अङ्ग्रेजी भाषा शिक्षामा दर्शनशास्त्रको स्नातकोत्तर उपाधिको लागि मञ्जु बस्नेतको शोधप्रबन्धको शीर्षक "लेखन सीप विकासमा सूचना तथा सञ्चार प्रविधि एकीकरणसम्बन्धी माध्यमिक तहका अङ्ग्रेजी शिक्षकहरूको अनुभव: एक गुणात्मक अध्ययन'" १ साउन २०८३ मा प्रस्तुत गरिएको थियो।

.....	….……..……..
सह. प्रा. टिकाराम पौडेल, पीएचडी	उप. प्रा. सिद्धार्थ ढुङ्गाना, पीएचडी
शोध निर्देशक	शोध निर्देशक

यस अध्ययनले लेखन शिक्षणमा सूचना तथा सञ्चार प्रविधि (आईसीटी) एकीकरण गर्ने माध्यमिक तहका अंग्रेजी भाषा शिक्षकहरूका अनुभवहरूको अन्वेषण गर्दछ। शिक्षकहरूले आईसीटीलाई कसरी बुझ्छन्, उनीहरूका अनुभवले कक्षाकोठामा अपनाउने शिक्षण अभ्यासलाई कसरी आकार दिएका छन् र लेखन शिक्षणमा डिजिटल प्रविधिको प्रयोगलाई कुन–कुन पक्षले प्रभावित गरेका छन् भन्ने अध्ययनको उद्देश्य हो। यस उद्देश्यलाई पूरा गर्न मैले अध्ययनको तर्कलाई आधार दिन सम्बन्धित विषयवस्तु, अनुभवजन्य अनुसन्धान, नीतिगत दस्तावेज र अनुसन्धान विधिसम्बन्धी समीक्षाहरूमा केन्द्रित भई सान्दर्भिक साहित्यको समीक्षा गरेँ। व्याख्यावादी अनुसन्धान प्रतिमानअनुसार मैले गुणात्मक अनुसन्धान पद्धति अपनाएँ। लेखन शिक्षणमा प्रविधि प्रयोग गर्ने माध्यमिक तहका चार जना अंग्रेजी भाषा शिक्षकसँग अन्तर्वार्ता निर्देशिकाको सहायतामा अर्धसंरचित अन्तर्वार्ता लिएँ र क्षेत्रीय टिपोट तयार गरी तथ्याङ्क सङ्कलन गरेँ। तथ्याङ्क विश्लेषणका लागि मैले ब्राउन र क्लार्क (२००६) ले प्रस्तुत गरेको चरणबद्ध प्रक्रिया अपनाएँ। विश्लेषणबाट आठवटा मुख्य विषयवस्तु पहिचान भए र प्रत्येक मुख्य विषयवस्तुअन्तर्गत चारवटा उपविषयवस्तु समेटिए। यी विषयवस्तुले आईसीटी एकीकरणसम्बन्धी चारै जना सहभागीका धारणा र उनीहरूले भोगेका अनुभवलाई प्रतिनिधित्व गर्छन्।

अध्ययनको विषयलाई बुझ्न, व्याख्या गर्न, विश्लेषण गर्न र परिभाषित गर्न मैले प्राविधिक, शिक्षणशास्त्रीय तथा विषयवस्तुगत ज्ञान (TPACK) को ढाँचा र रचनावादी सिकाइ सिद्धान्त (Social Constructivist Theory) अपनाएँ। यी सैद्धान्तिक दृष्टिकोणले शिक्षकहरूले अनुभव, सहकार्य र आत्मचिन्तनबाट आफ्नो प्राविधिक ज्ञान कसरी विकास गरे र दैनिक शिक्षण अभ्यासबाट कसरी अर्थ निर्माण गरे भन्ने बुझ्न सघाए। अध्ययनका निष्कर्षले आईसीटीप्रति शिक्षकहरूको धारणा समयसँगै बदलिँदै जाने देखाउँछन्। औपचारिक तालिम सीमित भए पनि र उनीहरूको कार्यपरिवेशमा विभिन्न बाधा रहे पनि निरन्तर सिकाइ, कक्षाकोठाको अनुभव र सहकर्मीहरूसँगको सहकार्यबाट लेखन शिक्षणमा आईसीटी एकीकरण गर्ने उनीहरूको आत्मविश्वास बढ्दै गएको पाइयो।

माध्यमिक तहका अंग्रेजी भाषा शिक्षकहरूले लेखन शिक्षणमा आईसीटी प्रयोग गर्दा बनाएका धारणा र हासिल गरेका अनुभवहरूको अन्वेषण गरेर यस अध्ययनले नेपालमा अंग्रेजी भाषा शिक्षा, विशेषतः लेखन सीपको शिक्षणमा आईसीटी एकीकरणसम्बन्धी बढ्दो विमर्शमा योगदान पुऱ्याउँछ। आईसीटी प्रयोगका अवसर र चुनौतीहरू पहिचान गर्दै यस अध्ययनले शिक्षकहरूको डिजिटल दक्षता बढाउन, प्राविधिक पूर्वाधार सुधार गर्न र प्रविधिको अर्थपूर्ण एकीकरणका लागि संस्थागत सहयोग सुदृढ बनाउन व्यावहारिक पहलको आवश्यकता औँल्याउँछ। TPACK ढाँचा र सामाजिक रचनावादी सिद्धान्तका आधारमा शिक्षकहरूको धारणा र अनुभवबारे सैद्धान्तिक बुझाइ विस्तार गर्दै यस अध्ययनले प्रविधिको सहायतामा लेखन शिक्षणलाई प्रभावकारी बनाउन चाहने शिक्षक, विद्यालय नेतृत्व,

नीतिनिर्माता र शिक्षक प्रशिक्षकहरूका लागि व्यावहारिक सुझाव दिन्छ। यी निष्कर्षले भविष्यका अनुसन्धानमा विविध शैक्षिक परिवेशमा आईसीटी एकीकरणसम्बन्धी शिक्षकका अनुभवहरू समयसँगै कसरी बदलिन्छन् भन्ने अध्ययन गर्न आधार प्रदान गर्छन्। त्यस्ता अनुसन्धानले अंग्रेजी भाषा शिक्षामा दिगो र सन्दर्भअनुकूल प्रविधि एकीकरणसम्बन्धी व्यापक विमर्शमा थप योगदान पुऱ्याउन सक्छन्।

..... १ साउन २०८३

मन्जु बस्नेत

उपाधि उम्मेदवार

This dissertation, entitled *Experience of Secondary Level English Language Teachers on Integrating ICT into Writing: A Qualitative Study* was presented by *Manju Basnet* on *17 July 2026.*

APPROVED BY

…… 17 July 2026
Asst. Prof. Siddhartha Dhungana, PhD
Dissertation supervisor

…… 17 July 2026
Asst. Prof. Jnanu Raj Paudel, PhD
External Examiner

…… 17 July 2026
Assoc. Prof. Tikaram Poudel, PhD
Head of Department, Language Education
Dissertation supervisor

…… 17 July 2026
Prof. Bal Chandra Luitel, PhD
Dean/Chair of Research Committee

I understand my dissertation will become a part of the permanent collection of the library of Kathmandu University. My signature below authorizes the release of my dissertation to any reader upon request for scholarly purposes.

…… 17 July 2026
Manju Basnet
Degree Candidate

© Copyright By Manju Basnet
2026
All rights reserved.

DECLARATION

I hereby declare that this dissertation is my original work, and it has not been submitted for the candidature for any other degree at any other university.

…… 17 July 2026

Manju Basnet

Degree Candidate

DEDICATION

To

My loving Family,

My enlightened Gurus

and

Directly/Indirectly involved All whose trust, endless love and celestial encouragement,

furnished my research journey to this end.

ACKNOWLEDGEMENTS

I realize how delighted one can feel after successfully completing of a profound project like a dissertation, and how blessed one can feel for all the encouragement and guidance from everyone around. Due to the continuous support and motivation, I received from numerous people from the beginning of my studies to the final dissertation, I was able to celebrate this success. I would like to express my humble gratitude to all of those who directly, or indirectly, have been a part of this research. I respectfully owe my special regard to a few names for their endless support and valuable time throughout this journey.

First of all, I would like to express my sincere gratitude to my supervisors, Assoc. Prof. Tikaram Poudel, PhD and Asst. Prof. Siddharth Dhungana, PhD, for their valuable time, enlightening guidance and continuous encouragement throughout the completion of this dissertation. Indeed, their timely suggestions after minute observation of my research always made me feel so grateful and inspired. Both their positive and constructive remarks boosted my self-motivation, helping me stay on track throughout my research journey. The resources they provided for my research progress contributed significantly to my success. Their knowledge, as reflected in their comments and input, always made me realize my limitations and inspired me to keep pursuing my desire to learn more about the subjects I was interested in. I am indebted to both of them for their parental-like academic guidance and attention to my research concerns. I further express my gratitude to my external supervisor, Asst. Prof. Jnanu Raj Poudel, PhD, for his rigorous and precise feedback and suggestions in my study.

I am equally grateful to Prof. Bal Chandra Luitel, PhD, Dean, Kathmandu University School of Education, whose farsightedness and creative insights are always motivating. In the same way, I would extend my deepest gratitude to Prof. Jai Raj Awasthi, PhD, for the expertise he shared in different semesters of the program. Similarly, I am thankful to all members of the Research Committee. I express my humble gratitude to respected Prof. Hem Raj Kafle, PhD and Prof. Laxman Gnawali, PhD, for their critical insights into the agenda studied in my research.

Moreover, I am very grateful to Khagendra Acharya, PhD, for his guidance throughout my research proposal and to Lava Deo Awasthi, PhD, for the celestial

knowledge he shared during the semesters. I also thank Asst. Prof. Bharat Prasad Neupane, PhD, for his critical remarks on my research proposal. I am equally thankful to Surendra Prasad Bhatt for his constructive feedback and insightful sessions regarding writing styles.

I especially want to extend my gratitude to my dear colleagues, Ananda Rai and Sabiha Sumbul, who helped me structure my dissertation and with APA editing. I am equally grateful to the Writing and Communication Center at Kathmandu University School of Education, especially Narayan Shrestha for the assistance in checking my references and ensuring consistency with APA formatting guidelines. I am grateful to my MPhil cohorts for their friendliness in sharing ideas on different academic topics. I feel blessed to be part of such a significant cohort where I have never experienced learning in isolation. I am also thankful for the support and welcoming nature of the KUSOED administrative staff.

I am equally grateful for my parents, Resh Bahadur/Mina Basnet, my husband, Bhishma Raj Adhikari, my sister, Anju Basnet, PhD, my loving children, Aayushma/ Aashraya Adhikari and my entire family for their endless love. Thank you everyone for all of your untiring support, which always protected me from potential mental, emotional, or physical downfalls. I am always grateful to all my in-laws for their love and trust. I thank my friends for their readiness to encourage me in every way.

Manju Basnet
Degree Candidate

TABLE OF CONTENTS

ACKNOWLEDGEMENTS i
TABLE OF CONTENTS iii
ABBREVIATIONS vi
CHAPTER I 1
INTRODUCTION 1
Scene Setting 1
My Experience in ICT Integration in Education 2
Background of the Study 4
Rationale of the Research 5
Problem Statement 7
Purpose of the Study 9
Research Questions 9
Delimitations of the Study 10
Chapter Summary 11
CHAPTER II 12
LITERATURE REVIEW 12
Understanding Information and Communication Technology (ICT) 12
ICT in Education 14
ICT Integration into Writing Skills 16
Teachers' Perceptions and Experiences of ICT Integration into Writing 17
Previous Studies on ICT Integration into Writing 19
Theoretical Underpinning 22
Technological Pedagogical Content Knowledge (TPACK) 23
Social Constructivist Theory 24
Gap Analysis 27
Conceptual Framework 28
..... 29
Chapter Summary 30
CHAPTER III 31
RESEARCH METHODOLOGY 31
Philosophical Considerations 31

Ontology....31
Epistemology....32
Axiology....33
Research Paradigm: Interpretivism....33
Qualitative Study as My Research Method....34
Study Site and Participants....35
Information Collection Tools and Technique....36
Analysis and Interpretation....37
Quality Standards....38
Credibility....38
Transferability....38
Dependability....39
Confirmability....39
Ethical Considerations....39
Chapter Summary....40
CHAPTER IV....41
PERCEPTION ON ICT INTEGRATION INTO TEACHING WRITING....41
Teachers' Conceptualization of ICT in Writing Instruction....43
Teachers' Awareness of ICT....45
ICT and Teaching Writing....46
Teachers' Understanding of ICT for Basic and Pedagogical Integration....49
Perceived Usefulness of ICT for Writing Development....51
Engagement and Motivation....54
Writing Enhancement and Language Learning....57
Accessibility of Authentic Learning Resources....60
Teachers' Beliefs Regarding ICT Integration....63
ICT-Enhanced Writing Instruction....64
Learner Autonomy and Classroom Management....66
ICT Rather Supports Than Transforms....69
Teachers' Evolving Professional Readiness for ICT Integration....71
Developing Confidence in Using ICT for Writing Instruction....76
Teachers' Professional Aspiration for Effective ICT Integration....78
Chapter Summary....80

CHAPTER V 82
EXPERIENCES OF ICT INTEGRATION INTO TEACHING WRITING 82
Teachers' Lived Experiences with ICT Integration in Writing Instruction 83
Beginning Teaching in Resource- Constrained and Low-Technology Contexts 86
COVID -19 as a Turning Point and Growing Confidence in ICT Integration ... 87
Teachers' ICT Practices in Writing Development 90
Teachers' Experience on ICT Integration for Pre-Writing Activities 92
Teachers' Experience of ICT Integration for the Writing Process 94
ICT Integration for Collaborative Writing and Feedback 97
Classroom Context and Infrastructures for ICT Integration 100
Availability of ICT Resources and Digital Infrastructure 102
Institutional and Administrative Support for ICT Integration 105
Classroom Environment and Students' Readiness for ICT Integration 107
Challenges and Future Direction 110
Challenges in ICT Integration for Writing Instruction 112
Future Directions for Effective ICT Integration 114
Chapter Summary 117
CHAPTER VI 119
SUMMARY, KEY INSIGHTS, AND VIABLE IMPLICATIONs 119
Summary 119
Key Insights 121
Viable Implications 124
REFERENCES 128
APPENDIX 148
Interview Questions 148

ABBREVIATIONS

AI	Artificial Intelligence
CDC	Curriculum Development Centre
CLA	Central Level Agencies
DEO	District Education Offices
EDPC	Electronic Data Processing Center
EFA	Education for All
EFL	English as a Foreign Language
ELT	English Language Teaching
ESL	English as a Second Language
GON	Government of Nepal
ICT	Information Communication Technology
IT	Information Technology
LMS	Learning Management system
MOE	Minister of Education
NCC	National Computer Centre
NCF	National Curriculum Framework
NGO	Non- Government Organization
NITC	National Information Technology Centre
NPA	National Plan for Action
NPC	National Plan Commission
OLPC	One Laptop per Child
RD	Reginal Directors
SLC	School Leaving Certificate
SSDP	School Sector Development Plan
SSRP	School Sector Reform Plan
TAM	Technology Acceptance Model
TPACK	Technological Pedagogical Content Knowledge
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
ZPD	Zone of Proximal Development

CHAPTER I
INTRODUCTION

Scene Setting

This study explored how secondary-level English Language teachers perceive and experience integrating Information and Communication Technology (ICT) into the teaching of writing skills. ICT refers to technologies that provide access to information through telecommunications (Cardona et al., 2013). These include the internet, wireless networks, cell phones, television, radio, and other digital communication tools, which have been influencing every sector today. The growth of ICT has changed how we learn and teach languages. These days, traditional paper-and-pencil writing activities and teacher-centered strategies are gradually being replaced with more student-centered and technology–enhanced approaches.

Over the years, as both a student and a teacher, I have come to understand just how much ICT has influenced education, especially in English Language Teaching (ELT). ICT has become indispensable in many facets of our lives, including education, health, entertainment, and transportation, as globalization continues to influence these areas. For instance, blogging can foster professional growth for educators and facilitate the creation of networks among English language teachers (Yadav, 2011). I have experienced this myself; sharing ideas and information through online platforms has supported my development and enabled me to network with other educators. Additionally, Patel (2013) also notes that technology has improved the effectiveness and engagement of instruction. We primarily used blackboards and whiteboards in the past. But now, multimedia tools such as videos, animations, and interactive activities can bring lessons to life.

When students watch videos or use digital tools, they learn more meaningfully and enthusiastically. I have seen my students' learning enhanced by technology. In this regard, Arifah (2014) also states that the use of the internet increases learners' motivation to learn and help them understand language structures and vocabulary through technology. My classroom also resembles this scenario. Pun (2013) views that advanced technology has paved the way for new teaching methods. In this globalized world, the English language teaching landscape is becoming increasingly diverse with learners from various backgrounds, nationalities, and age groups.

Thus, educators with ICT skills are more likely to be technologically adaptive to stand out in the teaching profession with an innovative attitude. So, teachers require positive attitudes to encourage students to use technology to locate relevant activities that support language acquisition (Harmer, 2007). In this regard, Alkamel and Chouthaiwale (2018) adds that integrating ICT requires teachers to develop specific digital skills to create a more interactive and learner-centred classroom environment.

My Experience in ICT Integration in Education

When I think back on my own learning experiences, I recall how happy I was when my English instructor brought a tape player to class. It is still fresh in my memory: during my school days, especially from the eighth standard, our English language teacher used to bring a big cassette player with him so we could listen to the tape script in the textbook. We used to enjoy the lesson more than in other English language classes. But sometimes, for a similar exercise, the teacher would read the script himself, and we all felt bored.

After completing of my School Leaving Certificate (SLC) examination in 2003, I enrolled in higher education. In grades 11 and 12, to teach the literature of William Shakespeare's plays, *Othello*, *Hamlet*, *King Lear*, our English language teacher used to take us to the computer room and show the drama. After the visualization of the drama, we felt a better understanding of the content. Such activities also helped us develop writing skills. However, during my Bachelor's Degree, I couldn't remember any instance when technology was integrated into my classroom learning. Later, during my Master's Degree at Kathmandu University, I had ample opportunities to learn from technology- enabled lessons. We used to get lessons with PowerPoints using laptops and projectors. We were fully equipped with the technology needed to learn university lessons. It surely helped me in my English-language learning process, especially by strengthening my writing skills.

After my academic degrees, I started working as a teacher. I started teaching in schools and tried to integrate technology as much as I could. I also encouraged my co-workers to use technology in education. In my classrooms, I practically used the available ICT tools. To be specific about my experiences, I recall my career vividly, starting at a primary school in Baneshwor. In that school, I used to integrate technology mostly in teaching literary texts, such as the 'Trojan Horse' lesson.

Along with teaching these texts, I used to show my students videos on subject such as biographies, autobiographies, and personal anecdotes. While doing this, I always found my students more engaged in learning with a full interest. Not only did I enjoy teaching with technology, but my students did as well. The use of technology made content easier to teach by minimizing the challenges I used to face while teaching young learners.

Besides the advantages of integrating technology into education, I have also encountered some challenges. I remember the time I used to drag the big speakers to the classes, asking the principal for permission to take the children to the audio-visual room. I used to carry my laptop and a cable to join the laptop, speaker, and projector, which these days are easily replaced by a tiny Bluetooth device, a handy mobile, and a projector. These incidents made me rethink the use of technology in teaching English, especially in the classroom where a teacher teaches writing skills to students, as it is the most essential skill to develop in learners.

In terms of writing skills, have always felt that I am not as expressive in writing as I am in speaking. It may be because of various reasons, such as a lack of practice. I always consider writing to be the foremost essential skill that I must possess as a student, teacher, and even a practitioner. On completing of my Master's Degree, I researched writing skills, focusing on developing paragraphs to strengthen my writing.

However, today I find that students are endorsing different approaches to improving their writing skills, unlike in the past. This is mostly due to technological advancements and their growing use in education. Specifically, the sudden outbreak of the COVID-19 pandemic forced educational institutions to adopt ICT in their educational practices. With the rapid advancement of technology, the prevalence of Artificial Intelligence (AI) has already been witnessed across the worldwide educational spectrum, the Nepali education system is still struggling with basic ICT tools in classrooms (Karki, 2019).

However, due to insufficient availability, I, as an English language teacher, was encouraged to integrate ICT in my pedagogical practice. Moreover, I found my co-teachers also aspire to the same. In fact, we use ICT tools such as PowerPoint presentations, and Google Docs. I even found some teachers using technology to teach writing skills, especially emails, business letters, news stories, news articles, and

press releases, which are mandatory exercises in the English curriculum for grades 11 and 12. Such scenarios encouraged me to explore more deeply how teachers are adopting this technological transformation. These personal and professional experiences worked as an impetus to conducting research on teachers' current perceptions and experiences of integrating ICT tools into writing instruction.

Background of the Study

We are currently living in the era of ICT. Nearly everything has been digitalized. Most of the sectors have been impacted by technology. From large conferences to regular classrooms, everything relies on the Internet connection. It is happening anywhere in the globe. Technology is considered to be a gift from God. It is maybe the greatest gift God has given us after life itself. Thus, the way we live has undoubtedly transformed due to the advancement in technology.

All aspects of human life have been impacted by advanced technologies these days. The incorporation of ICT across several areas has also changed people's lifestyles changing how they communicate with one another, find information, work, operate businesses, deal with government agencies, and manage their social life (Roztocki et al., 2019). Besides, Lim et al. (2020) also highlighted that the use of ICTs is shifting the paradigm or knowledge grasped and disseminated across sectors, including in education.

Thus, this way the transformation in education is taking place with the emergence of technology. It has increasingly become part of English language education and can support writing development. In this regard, Mdhlalose and Mlambo (2023) also claimed that education sector is undergoing transition due to the incorporation of technology into educational practices. Aduwa-Ogiegbaen and Iyamu (2005) explained the importance of emerging ICT tools in education, adding that knowledge and information are easily available via satellite and internet tools, such as eBooks that replace the conventional hard books, bringing modern change in the field of education. This growth of ICT has significantly impacted the education industry, as it has on other industries.

As a result, the use of ICT in the classroom is crucial providing students with opportunities to acquire and apply the necessary 21st -century skills (Mdhlalose & Mlambo, 2023). This use of technology in education has increased over time, particularly during the COVID-19 pandemic, which has fundamentally shifted the

traditional dynamic of teaching and learning to an online mode (Rao & Ramana, 2022). The increasing use of technology has changed pedagogical practices by promoting interactive, student centered, and collaborative learning (Rajendran & Kaur, 2023). These benefits in educational practice provide the foundation or integrating technological practices into language education and support writing instruction by facilitating brainstorming, collaboration, revision, and formative feedback (Veddayana et al., 2025).

This way, technology integration has become an important practice for improving writing skills and can support different stages of the writing process. Despite the benefits of integrating ICT into writing instruction, its successful integration into educational practices largely depends on teachers (Regan et al., 2019). They are the ones to select, adopt and implement it into classroom instructions. So, understanding how teachers perceive and experience the integration of ICT into writing instruction is important to identify the opportunities, challenges, and contextual factors that influence its effective use. This need is particularly important in the context of Nepali public schools, where limited research has explored how English language teachers experience and integrate ICT into writing instruction.

Thus, this study focused particularly on technology in writing instruction and on increasing our understanding of the advantages, difficulties, implementation, and instructors' attitudes. It was crucial to examine their perceptions and experiences with the use of technology in writing instruction. Therefore, this study was conducted to examine how technology was integrated into the teaching of writing skills in Nepali ESL classes at the secondary level (Grade eleven and twelve).

Rationale of the Research

When reflecting on ICT in education, I recall the day I took an online class during the COVID-19 pandemic. That day, one incident made me feel very uncomfortable. To mention, I was teaching a grade 12 class online and struggled to find a drop-down button to access more options in Google Docs. At that time, neither did I request my students to help me with that, nor could I quit the class out of embarrassment. Thankfully, one of my students helped me find that button without making me feel more awkward among all my students. That time, I realized how much I lacked in technological knowledge despite having taught high school students for years. Moreover, I frequently heard from my co-teachers about today's students'

techno-savviness. Such incidents made me realize the reality of teachers' technological skills, and how they could affect their pedagogical practices.

As Nepal has invested substantial resources in ICT integration in education, recent studies indicate that implementation continues to face significant challenges. Khadka and Shahi (2025) identified a gap in secondary- level English teachers' technological and pedagogical competences, while Acharya (2025) highlighted disparities in ICT implementation across schools in Nepal. The reality on the ground still misaligns with the investment's intent (Karki, 2019). These suggest a continuing gap between Nepal's educational aspirations and classroom realities. Thus, based on the relevant literature (and my personal experiences), it can be seen that the envisioned goals have not been achieved. In such a situation, I was prompted by the question of how teachers perceive and experience ICT integration in their classroom activities, particularly when teaching writing, since it has been given high priority in the high school curriculum, i.e., grades 11 and 12.

Basically, writing is one of the four language skills. It is also one of the best tools for communication. Walsh (2010) highlights the importance of writing, noting that it is widely used in higher education and the workplace. Thus, students with better writing skills could perform better in their academic journey and beyond.

With the rapid advancement of technology, ICT use in the academia is prevalent. Consequently, it has been considered beneficial for improving students' writing skills. In Nepal, the integration of ICT into English language teaching has become an important educational priority. The Government of Nepal, through its School Education Sector Plan (SESP) 2022-2032, emphasizes the expansion of ICT infrastructure, the development of teachers' digital competencies, and the integration of digital resources into classroom teaching and learning (Ministry of Education, Science and Technology [MoEST], 2022). However, the plan also acknowledged that inadequate technological infrastructure, limited teacher capacity, and insufficient digital learning materials continue to constrain the effective use of ICT in schools. These policy priorities and implementation challenges highlight the importance of understanding how teachers perceive and experience technology integration in these everyday teaching practices. So, these realities in the Nepali context, I assume, are the prime time to examine classroom realities regarding ICT use in pedagogical practices. I believed that it could provide insights into how the secondary- level English

language teachers adopt, adapt, or negotiate the use of ICT in response to their existing beliefs, professional competencies and institutional circumstances. Thus, this study explores the teachers' perceptions and experiences regarding ICT integration into writing instruction. By uncovering classroom contexts, this study benefits policymakers, stakeholders, researchers, and practitioners by informing the design and implementation of effective actions to ensure the integration of ICT in education, especially in writing instruction.

Problem Statement

Integrating ICT into ELT has become increasingly important amid the changing landscape of educational settings globally, including in Nepal. The shift to virtual and Hybrid-Flexible teaching models during the COVID-19 pandemic presented a unique challenge for English Language Teachers in Nepal, especially in teaching writing skills. In writing instruction, digital technologies can facilitate planning, drafting, revising, editing, and providing feedback. However, one critical concern that emerged during this shift was that both teachers and students both had to use technology in educational practices. This has impacted both teachers and students. As a result, the teachers tended to copy directly from the internet rather that engage in the creative and cognitive process of writing. This practice not only diminishes students' creativity but also hinders the development of critical thinking and self-expression, both major aspects of writing instruction. Despite some training programs offered by educational institutions, many teachers struggle to manage interactive virtual classrooms, ensure student management, and overcome technical glitches such as power cuts, and poor internet connectivity (Ramachandran, 2021).

However, the availability of technological resources and infrastructure does not necessarily ensure their meaningful integration into pedagogy. Some international research has highlighted the importance of teachers' beliefs, technological competencies, pedagogical knowledge, and institutional support in shaping classroom practices. Yang and Huang (2008), in their study of secondary- level English teachers in Tiwan, found that teachers' use of technology was associated with their beliefs, computer literacy, training, and school support. Similarly, Mali and Salsbury (2022), investigating technology integration in Indonesian university EFL writing classrooms, found that technology was used particularly effectively during the planning stage, whereas its use during other stages of writing was more limited. These findings

indicate that technology integration needs to be examined in relation to specific teaching practices rather than simply the availability or frequency of digital tool use.

In Nepal, the integration of ICT has become an important national educational priority. The School Education Sector Plan (SESP) 2022-2032, emphasizes ICT infrastructure development, digital learning materials, teacher capacity development, and technology-supported teaching and learning. However, it has also identified challenges related to technological infrastructure, digital resources, and teachers' capacity to integrate ICT effectively. These policies and commitments raise important questions about how national aspirations for technology- enhanced education are experienced and articulated into classroom teaching, particularly in secondary- level writing instruction.

Research conducted in Nepal, has shown the various aspects of ICT integration in English language teaching. For instance, Thapaliya (2014) investigated the perceptions and practices of 47 secondary- level English teachers in Kathmandu and reported generally positive attitudes towards the use of ICT. Similarly, Sharma (2022) examined secondary English teachers' perceptions and the challenges they encountered in using ICT in Kathmandu's public schools. Similarly, Joshi and Khatiwada (2024), in their studies investigated the challenges of teachers in using ICT and they encountered that there were many challenges for the teachers like infrastructural issues, lack of effective and focused training on the use of ICT tools and the Learning Management System (LMS), teachers' limited familiarity with the platforms like Zoom, Google Meet, and other digital tools that further contributed to the difficulties in adopting their pedagogical practices to the online mode of classroom instruction.

During this time in my academic practices, I also experienced a similar situation while teaching my students in grades eleven and twelve at a community school in Bhaktapur District. It was such a challenging time for me to teach the students virtually without effective training and guidelines for using various LMS and online tools. Teaching writing skills in a virtual format, without proper training and institutional support, was overwhelming.

Though the existing studies from national and international educational context have shown the potential of using ICT in classroom teaching, further investigation is warranted into how secondary -level English teachers construct and

interpret their experiences of integrating ICT into the different stages of writing instruction, how these experiences develop over time, and how institutional and pedagogical circumstances shape their decision.

Besides, research suggests that although teachers recognize the educational value of ICT, they still face challenges such as inadequate infrastructure, poor internet connectivity, limited access to digital devices, lack of professional development, and insufficient support, which hinder effective pedagogical implementation (Joshi & Khatiwada, 2024). Although the benefits and barriers of ICT integration have been documented in previous studies, very few have explored how secondary English teachers perceive, experience, and navigate the integration of ICT into writing instruction in their everyday classroom teaching.

Against this background, the present study seeks to explore, through qualitative research study, secondary level English teachers' perceptions and experiences of integrating ICT into writing instruction. By listening to teachers' individual stories, professional journeys, pedagogical practices, and the context in which they work, the study aims to develop a deeper understanding of how teachers negotiate the opportunities and challenges of technology- supported writing instructions.

Thus, teachers' perceptions and experiences regarding the use of ICT in teaching writing skills are crucial to understand how these technologies can be applied in the Nepali context. Considering the complexities of adapting to the "new normal" of digital learning environments, it is important to explore how teachers perceive the integration of ICT into writing instruction, the challenges they face, and the solutions they employ to overcome them. Without further research on this topic, the potential of ICT in developing writing skills at the secondary level remains largely unexplored, and current problems may continue to hinder meaningful progress in ELT in Nepal.

Purpose of the Study

The purpose of this study was to explore the secondary-level English language teachers' perceptions and experiences of ICT integration into writing instruction.

Research Questions

Based on the purpose of my study, I formulated the following research questions:

Q 1. How do secondary-level English language teachers perceive ICT integration into writing instruction?

RQ 2. How do secondary-level English language teachers narrate their experiences of practicing ICT integration into writing instruction?

Delimitations of the Study

This study is delimited to exploring the perceptions and experiences of secondary-level English language teachers regarding the integration of ICT into writing instruction. To maintain a clear focus and ensure the feasibility of the research, this study establishes several delimitations regarding the participants, research context, thematic scope and methodology.

Regarding the participants, the study focuses exclusively on secondary- level English language teachers who have experiences integrating ICT into writing instructions. This allowed the study to develop an in- depth understanding of the perspectives and experiences of teachers directly involved in secondary-level English writing instructions. In terms of its thematic scope, this study concentrates specifically on teachers' perceptions and experiences of using ICT in writing instruction rather than examining technology integrated across all English language skills. Although ICT may support listening, speaking, reading and writing, this study focuses on writing- related pedagogical practices, including planning, drafting, revising, editing, and providing feedback. It also explores the opportunities, challenges and contextual factors that influence teachers' experiences of integrating ICT into these practices.

Geographically and institutionally, the study is confined to public secondary schools in the Bhaktapur District of Nepal. Its findings are therefore situated within the educational, technological, and institutional circumstances of the participating schools. Likewise, methodologically, the study adopted a qualitative research approach to explore teachers' perceptions and experiences through their personal and professional stories. This approach is appropriate for understanding how teachers construct meaning from their experiences of integrating ICT into writing instruction. The study prioritized detailed accounts of individual experiences rather than statistical measurement and generalization. Finally, in terms of contextual and temporal scope, the study examined participants' experiences during the data collection period and allows them to reflect on the past teaching experiences. Although national ICT policies and institutional provisions provide important contextual information, the

study does not undertake a comprehensive evaluation of ICT policy implementation across Nepal. Instead, it examines how participating teachers understand and experience ICT integration in their professional contexts.

Chapter Summary

I began this chapter with a brief scene-setting that depicted the circumstances I have been facing in teaching English to a large number of students at my workplace. This chapter introduces the study by reflecting on the researcher's journey with technology in learning and teaching English, especially writing skills in the background of the study. It highlights the transformative role of ICT in enhancing student engagement, comprehension, and teacher effectiveness. It presents the rationale for exploring how secondary-level ELT teachers perceive and experience ICT integration in writing instruction. Then, I made a brief problem statement of my study, research purpose, and research questions. The chapter also outlines the study's delimitations.

CHAPTER II
LITERATURE REVIEW

This chapter presents a review of the relevant literature for this study. I present a review of the literature, contextualizing it within Nepali academia. Moreover, the empirical review of the existing literature in this chapter shapes the expanding perspectives in this field of study. In other words, reviewing previous studies by various scholars helped me explore the status of the phenomenon examined in this study within my research context. So, the empirical review highlights recent studies on integrating technology in teaching writing skills. Furthermore, the policy review deepened my understanding of ICT integration within the Nepali epistemic spectrum. In addition, the theoretical review sheds light on the theories that offer the theoretical base for this research. It sets the ground for contributing to the field by generating new knowledge.

Addition to the mentioned reviews (thematic, theoretical, empirical, and policy), this chapter presents a research gap and a conceptual framework for this study. The research gap underscores the need for this study. Moreover, the conceptual framework presents the overall landscape of the activities considered in this study. Similarly, the chapter summary provides an overview of the chapters' development.

Understanding Information and Communication Technology (ICT)

ICT encompasses various technological tools for generating and exchanging information. In this regard, United Nations Educational, Scientific and Cultural Organization (UNESCO, 2023) also states that technology supports creation and sharing of information. Oliver (2002) claims that the education sector has yet to be significantly impacted by technology, compared with other fields such as business and industry. However, Rana (2018) found that the advancement of digital technology and its use is highly influencing the educational field, resulting in internationalization.

The dynamic nature of ICT allows teachers and learners to establish independent and accessible learning opportunities. ICT serves as a professional resource, a means of delivering instruction in the classroom, and the foundation for popular and useful text formats for instructors. ICT is promoted as a crucial instructional practice (Navas-Bonilla et al., 2025). Likewise, according to Kozma (2002), ICT has been a key factor in determining better educational activities

worldwide. It signifies that ICT is now recognized as an effective element in ELT for finding relevant educational resources and conducting evaluation and assessment. ICT serves as a professional resource, a means of delivering instruction in the classroom, and the foundation for popular and useful text formats for instructors.

Though ICT integration in academia is the most appealing practice in education, it is not an easy or smooth process. However, Kinaanath (2013), highlighted that despite difficulties in using educational technologies, the educational field will be significantly impacted by it in the future. It indicates that ICT is used effectively in teaching and learning, and teacher-student contact improves in classroom activities. This way, ICT improves teaching and learning in the classroom by making digital information accessible, encouraging interactive and collaborative learning environments, and supporting the development of 21st- century skills such as creativity, critical thinking, and digital literacy.

Besides, ICT integration allows students to improve their communication and writing skills by providing opportunities for interaction, collaboration, feedback and revision. Pardede (2024), in a systematic review of 45 empirical studies, reported that technology-enhanced collaborative writing improves students' writing performance, engagement, motivation and collaboration. Similarly, Kassim et al. (2024) highlighted the potential of web-based platforms, including Google Docs and social media, to facilitate interactive writing activities within and beyond the classroom. However, the effective integration of ICT depends on teachers' technological competencies, pedagogical approaches and institutional support.

In the Nepali context, Khadka and Shahi (2025) found that secondary- level English teachers had moderate ICT proficiency but struggled to integrate more advanced technologies into their writing instruction. It is a useful tool for writing, studying, viewing, replying, and representing in English. In this way, ICT was seen as a key element of the online teaching approach across all levels of education.

Consequently, it is a useful teaching tool that enhances teaching and learning activities, especially in the ELT classroom, in different ways. Using various technological communication tools, such as a computer, laptop, projector, email, mobile device, and the internet, not only promotes learners' engagement in learning but also ensures their autonomy in learning both inside and outside classroom.

According to UNESCO (2023), digital libraries, educational repositories and online learning platforms have expanded access to teaching and learning materials by reducing geographical and logistical barriers. In English writing instructions, teachers can used these platforms to access authentic texts, model essays, interactive grammar exercise, and instructional videos, while students can explore relevant information, develop ideas, and improve their writing through independent learning. Besides, the availability of digital resources allows teachers to select and adapt instructional materials according to the students' learning needs, making writing instruction more flexible and resource- rich.

As the most debated concern, ICT provides seamless access to pertinent educational resources and facilitates evaluation and assessment activities for both learners and teachers. Thus, ICT is promoted as a crucial instructional practice (Navas-Bonilla et al., 2025) without which we can barely imagine language classrooms or educational institutions standing high in this technological era. As ICT serves as a professional resource, a means of delivering instruction in the classroom, and the foundation for popular and useful text formats for instructors, it also presents various challenges.

ICT in Education

In this digital age, every sector is highly influenced by ICT, including education. It is considered a means of better communication among humans (UNESCO, 2023). Concerns about the use of technological tools are taken into consideration in education worldwide Technology-enhanced learning and teaching are considered more productive nowadays. Hence, ICT offers us an engaging way to acquire knowledge. ICT not only makes education engaging, but it also helps learning stick, and certain impressions could endure a lifetime.

As ICT integration is a prevalent and significant concern in academia, it is addressed in most educational institutions. Thus, ICT is encouraged as a key instructional practice that facilitates the identification of relevant educational resources, evaluations, and learning assessment (Ramanathan et al., 2024). For the facilitators, ICT serves as a resource, a method of instruction, and the foundation for popular and successful text kinds. However, ICT offers pupils the possibility to improve their communication and acquire mastery skills, such as critical literacy. It is a useful resource for reading, writing, responding, watching, and presenting in

English-language classroom. ICT is seen as a crucial element not only in online instruction, in higher education but also in lower- level classrooms. As a result, it is taken as an effective teaching tool to enhance the learner's learning progress.

When ICT is integrated into teaching and learning, it helps students become more proactive, as the skills they gain can be used in real-life situations. The increasing use of technology in education has had a substantial impact on how students are taught and how they learn (Haleem et al., 2022). Niess (2005) noted the importance of pedagogical subject knowledge in the context of technology. So, language teachers these days need to be tech-savvy and able to teach their pupils about it. Particularly in the language classroom, although ICT use is currently common in most places, it is not uniform everywhere. Nevertheless, the use of ICT in ELT is growing significantly and is projected to become a standard component of ELT practice in the years to come (Dudeney & Hockly, 2007). Therefore, modern teachers need to understand how to use technology. It is impossible to undervalue the role that technology plays in education.

While almost every aspect of modern civilization has been profoundly affected by ICT, ICT also serves as a catalyst for societal change. Kirkwood (2014) asserts that ICT is implicated in global societal shifts; specifically, mobile phones, the internet, and social media have been linked to critical social developments over the past two decades. The incorporation of ICT into several areas has also changed people's lifestyles. Thus, Roztocki et al. (2019) stated that ICTs have changed how people communicate, find information, work, operate businesses, interact with government agencies, and manage their social lives.

ICT in education has the potential to change conventional ways of education. Aduwa and Iyamu (2005) emphasize the importance of ICT in education in this globalizing world, where knowledge and information are widely transmitted via satellite and the internet. Consequently, in today's knowledge economy, ICT has a considerable influence on many sectors (Lim et al., 2020). Although ICT tools have benefited students, instructors, educators, and educational institutions, they have not been without criticism. Keengwe et al. (2008) also state that technology may bring challenges as well as opportunities for educators when incorporating it into their teaching and learning activities in the language classrooms. Moreover, Livingstone (2012) asserts that ICT-integrated education emphasizes the on the use of educational

technology while valuing conventional teaching and learning processes and resources. These changes present educational institutions with both opportunities and challenges.

Thus, policymakers worldwide sought to integrate technology into the languagnarrae classroom. In this regard, the U.S. Congress, Office of Technology Assessment (1988, 1989, 1995) and the U.S. Department of Education (2010) have claimed that incorporating technology into education leads to better educational outcomes. Various countries, such as the United Kingdom and the United States, with focused educational policies, have made large financial expenditures on technology for teaching and learning (Nutt, 2010). Particularly during the past ten years, such expenditures have improved access to and the caliber of instructional technology offered in schools (Davies & West, 2013). So, ICT is replacing the conventional academic system with an advanced ICT- integrated system in this digital era.

ICT Integration into Writing Skills

Teaching writing has been strongly influenced by ICT in recent years. In other words, ICT has transformed conventional ways of teaching writing into a new and more advanced approach. It has begun to determine how students' progress and their writing abilities improve, with and without ICT tools. In particular, the emergence of AI has been the most influential factor in escalation of students' writing skills. Moreover, digital technologies and online resources have given students access to a variety of platforms that support ideation, drafting, editing, and publication.

Research indicates that offering interactive and multimodal experiences improves students' motivation and engagement in writing assignments (Yunus et al., 2019). For instance, students may write and revise their work more quickly with word-processing programs like Google Docs and Microsoft Word, which offer features such as grammar recommendations, spell check, and real-time collaboration. These tools serve as scaffolding mechanisms that help students improve their writing skills while reducing their anxiety about coherence and grammar (Hyland, 2018). In this way, academia worldwide is impacted by the use of advanced technological tools, regardless of how extensively they are used.

Incorporating ICT into writing instruction promotes more student-centred teaching and learning activities in classrooms (Regan et al., 2019). Specifically, in the language classroom, it enhances learning outcomes by promoting student engagement, whether creatively or effectively. Although it has brought various

challenges in managing the technology-equipped language classroom, it has been argued that teachers can support themselves in becoming more proactive and techno-friendly as they have to use it efficiently anyway (Yunus et al., 2013). To create technology-friendly language classroom activities, teachers can employ peer review and collaborative writing, which are essential for enhancing students' critical thinking and communication abilities and are supported by online discussion boards, blogs, and collaborative platforms such as Padlet and Edmodo (Veddayana et al., 2025). Simply put, teachers need to be up to date on various teaching and learning methods appropriate for teaching language in the classroom.

Some scholars suggested that the use of technology- driven writing tools helps students to write more coherent and organized writing (Zhang & Zou, 2022). In addition, ICT integration is important, because it enables students to communicate effectively and creatively (Dalton, 2019). Besides, ICT has the potential to improve writing instruction through collaboration, revision, feedback, and learner engagement; however, its effective integration is lacking in our language classrooms (Joshi & Khatiwada, 2024). Not only this, but digital technologies also assist in each of these stages by enabling brainstorming, collaborative writing, and real- time feedback. It also helps in planning, drafting, revision, editing and continuous feedback (Yunus et al., 2013). This way, ICT tools and technology- driven or integrated pedagogical approaches are important for improving writing skills, engagement, collaboration and overall writing performance.

Teachers' Perceptions and Experiences of ICT Integration into Writing

With the rapid advancement of technology, many educational institutions are increasingly adopting digital technologies to enhance teaching and learning. This integration of ICT has thus become a central concern in contemporary education, influencing pedagogical practices and impacting the development of all language skills and aspects; writing is no exception. However, the successful integration of ICT in teaching depends not only on how readily available the technological tools are but also on how teachers feel about and experience their use in pedagogical practice. As a result, the teacher serves as the primary agent of educational change, and their beliefs, attitudes, professional knowledge, and classroom experiences significantly influence the quality and effectiveness of ICT integration (Tondeur et al., 2017). Therefore,

understanding teachers' perceptions and experiences is fundamental to explaining how ICT is enacted in writing instruction.

Teachers' perceptions refer to how teachers view, understand, interpret, and make sense of ICT integration into writing instruction. These perceptions encompass their beliefs, attitudes, and judgments regarding the use of ICT in teaching writing, which influence their technology integration practices, and are shaped by their experiences, professional training, school context, and institutional support (Abel et al., 2022). Positive perceptions encourage teachers to experiment and implement innovative technological tools, whereas negative beliefs or uncertainty may limit the effective use of technology (Qasem & Viswanathappa, 2016).

Teachers' experience, on the other hand, refer to their actual practices of integrating ICT into writing instructions and the opportunities and challenges they face during implementation. Teachers generally view ICT integration as a valuable means of supporting writing instruction through digital tools that support different stages of the writing process, including brainstorming, drafting, revising, editing, collaborative writing, and providing feedback (Vicentini & de Oliveira, 2018). These experiences of ICT integration demonstrate that, although technology can enhance students' engagement and writing instruction, successful implementation is influenced by teachers' digital competence, classroom context, infrastructure, and continuous professional development (Demissie et al., 2022).

Thus, both the teachers' perception and experiences of ICT integration are shaped by various personal and professional factors, including technological competence, professional development, institutional support, infrastructure, and access to digital resources (Tondeur et al., 2017). However, challenges such as unreliable internet connectivity, limited technological resources, inadequate ICT training, and students' varying levels of digital readiness continue to hinder effective ICT integration, particularly in developing countries (Msambwa et al., 2024).

Overall, the literature suggests that teachers' perceptions and experiences are closely interconnected, where positive perceptions often lead to greater ICT use. Furthermore, their successful classroom experience in ICT use strengthens their confidence and willingness to integrate technology further. Thus, exploring teachers' perceptions and their lived experience provides a more comprehensive understanding of ICT integration into writing instruction, especially in the Nepali context, where

limited research has examined how secondary-level English language teachers perceive and experience ICT integration in writing classrooms.

Previous Studies on ICT Integration into Writing

I found many scholars who conducted various studies exploring different dimensions of ICT integration in education in Nepal as well as in different international spectrum. As Creswell (2012) suggested, when submitting a research-based production project or a funding request for creative work, it's crucial to demonstrate familiarity with prior work in the researcher's field. Thus, reviewed relevant previous literature, which consequently helped me address gaps and provided a foundation for future study. For this reason, I have reviewed the previous relevant dissertations. Engagement with these scholarly works has provided me with valuable insights and helped me further direct my study.

A research study conducted more than ten years ago by Das (2013) examined schools' experiences with technology-facilitated education. The study found that Nepali schools faced various challenges in implementing techno-pedagogy (as Das terms it). The challenges ranged from basic power cuts to financial constraints, which hampered efforts to bring about change in modern teaching and learning practices. That interpretive inquiry found that, at the time, teachers were more reliant on conventional practice due to these basic challenges. So, the teachers were more aligned with conventional classroom teaching and learning activities.

Similarly, Joshi and Khatiwada (2024) conducted a qualitative study exploring online sources for writing skills. This study seems to be a surface study in this area, as it was not very specific to ICT use in the ELT classes. This study also left room to explore ICT within the epistemic spectrum. Similarly, Laudari (2019) conducted a case study on the teacher educators in Nepal. In this study, the researcher focuses on the use of ICT tools. It was also not sufficient to look at the real ICT integration in education in the country.

Likewise, another researcher, Pokharel (2019), also investigated students' perceptions regarding the use of ICT in developing writing skills. The purpose of the study was to examine students' perceptions of the use of ICT in enhancing English language writing skills. To achieve the study's aim, she employed a survey as the research strategy. The participants in the study were 30 students from Tribhuvan University's ELT faculty, selected using a purposive-non-random sampling.

Questionnaires serve as a research tool for gathering information from students. The study's findings revealed that master 's-level students had a good opinion of the usage of ICT in enhancing English writing skills for professional growth and improved learning experiences.

Bhattarai (2021) also conducted a phenomenological study with two secondary-level English teachers to explore the purposes and challenges of ICT integration in English teaching in Nepal. In-depth interviews revealed that teachers developed ICT literacy through formal courses, training, personal learning, and their teaching experiences. Teachers perceived ICT as useful for language development, learner motivation and autonomy. At the same time, this study identifies difficulties associated with integrating technology into classroom teaching. Its phenological orientation is particularly relevant because it acknowledges teachers' lived experiences rather than reducing ICT integration to measurable technological competencies. However, the small sample and broad focus on English language teaching leave considerable scope for investigating how teachers experience ICT especially in the teaching of writing.

In the international context, I found that Raygan and Moradkhani (2022) investigated factors influencing technology integration among 209 Iranian EFL teachers, with a particular focus on teachers' attitudes, TPACK and educational climate. Using a qualitative approach, they found that TPACK and attitudes significantly predicted technology integration, while school climate indirectly influenced integration through teachers' attitudes. However, the study provides limited insight into teachers' lived experiences and focuses on general EFL teaching rather than writing instruction.

Focusing especially on writing, Mali and Salsbury (2022) qualitatively explored technology integration among their Indonesian EFL writing lectures. They found that technology supported different stages of process writing, particularly planning, submission, and feedback. While, the study demonstrates how technology can support writing pedagogy, its small sample and university context limit its applicability to secondary-level teaching highlighting the need for research within different socio-educational context.

Similarly, Wang (2022) examined TPACK and technology integration among 525 EFL teachers and found variations in teachers' confidence, particularly in using

technology to promote higher- order thinking skills. Although the large sample provides useful evidence about teachers' technological knowledge and confidence, the survey-based approach offers a limited understanding of how teachers experience and address technological and pedagogical challenges in actual classrooms.

Saud and Laudari (2023) further conducted research using a hermeneutic phenomenological approach exploring English language teachers' lived experience and perception of ICT integration in Sudurpaschim, Nepal. The study contributes important contextual understanding by positioning technology integration within teachers' everyday professional experiences rather than examining technology as an isolated instructional tool. It consequently provides a useful foundation for understanding how teachers interpret opportunities and constrains associated with ICT use. Nevertheless, its focus is ICT integration in English language education broadly; the distinctive pedagogical processes involved in teaching- such as planning, drafting, revision, editing, and publication, are not its central concern.

As time passed, ICT in education seemed to be embraced more productively and effectively despite emerging challenges. Recent studies, such as Rai (2024), found that ELT teachers from using technology in their English language classrooms. The case study aims to explore the ICT-based teaching and learning practices used by English language teachers to enhance their students' speaking skills. In this regard, the study found techno-based pedagogical practices to be crucial in developing learners' speaking skills, as it helped the learners achieve 'native-like' intonation through exposure to authentic learning resources.

Similarly, another recent qualitative study by Basnet (2025) found that teachers face various challenges when integrating ICT into their classroom pedagogy. Besides, they perceived ICT as the most significant element to incorporate into education in this digital era. The study found that teachers expect support from the relevant authority, and that this support also benefits the participants. In addition, as teachers concerned with ICT integration in education, they find ways to address potential difficulties in their ICT-based pedagogical activities.

While exploring the relevant literature for my study, I could not find any studies that examined the phenomena I investigated. Instead, the one I found somewhat similar was conducted by Mali and Salsbury (2022), both of whom identified master's-level students' perceptions of the use of ICT in developing writing

skills. These studies highlighted the significance of using ICT tools (such as radio, television, mobile apps, digital library, laptop, etc.) in developing students' writing skills. Both international and Nepali studies indicate that positive attitudes and basic technological skills alone do not ensure effective ICT integration. Teachers' practices are also influenced by pedagogical knowledge, professional development, institutional support, and access to resources. Although studies have shown that technology can support different stages of writing, much of the research has been conducted in higher education or in contexts different from those of Nepali secondary schools.

In Nepal, research has mainly examined general ICT use, teachers' perceptions, competence and challenges, while teachers 'experiences of integrating ICT specifically into writing instruction remain unexplored. Moreover, qualitative studies offer only limited insights into how teachers interpret and negotiate these experiences in their actual teaching contexts.

Thus, the reviewed literature showed that the phenomena examined in this study have yet to be explored, as this study specifically aims to examine secondary-level English language teachers' (who have been working in community schools in Bhaktapur for years) perceptions and experiences in ICT integration into writing instruction. So, this study is a pressing need that helps to uncover the realities of ICT integration into writing instruction in schools through the first-hand experiences of English language teachers.

Theoretical Underpinning

The present study is informed by theoretical perspectives that help explain teachers' perceptions, experiences, and practices regarding the integration of ICT into writing instruction. Specifically, the study drew on the Technological Pedagogical Content Knowledge (TPACK) framework by Mishra and Koehler (2006) and the Social Constructivist theory by Vygotsky (1978). These theoretical perspectives provide a foundation for understanding how teachers perceive and adopt technology, how they integrate technological and pedagogical knowledge into writing instruction, and how their practices are influenced by their professional and socio-educational contexts. Together, these theories provide the theoretical lens through which the teachers' narratives and experiences are interpreted in the present study.

Technological Pedagogical Content Knowledge (TPACK)

Technological Pedagogical Content Knowledge (TPACK) is a theoretical framework integrates three types of knowledge. They are Technological Knowledge (TK), Pedagogical Knowledge (PK) and Content Knowledge (CK). Mishra and Koehler (2006) projected the TPACK model of integration in their research article "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge" (Mishra et al., 2022). Besides this, the TPACK framework describes how content (what is being taught) and pedagogy (how the instructor transmits that material) must form the cornerstone for any effective edtech integration. The components included in the framework need to work together to enhance learners' learning outcomes.

In the context of my study, "Experience of Secondary Level English Teachers on Integrating ICT into Writing: A Qualitative Study", the TPACK framework offered an appropriate theoretical lens to explore the phenomena undertaken in this study as it helps to examine how secondary-level ELT teachers incorporate technology into their writing instruction by drawing on their content knowledge of English writing, pedagogical knowledge of how writing is taught, and technological knowledge of tools such as word processors, collaborative platforms, and grammar checkers. Besides, it provided insight into the types of ICT resources that secondary ELT teachers use to teach writing, including Google Docs, Grammarly, blogs, and collaborative platforms. These technologies are frequently selected not only for their accessibility, but also for their educational benefits, including real-time feedback, peer collaboration, increased engagement, and the convenience of posting student work (Abalkheel et al., 2023).

The TPACK model, as I understand it, illustrates how teachers use ICT tools, plan lessons, start and continue classes, provide digital feedback, and even make adjustments to meet the needs of diverse learners. Besides, it provides, researchers like me with a full understanding of teachers' decisions and behaviours regarding ICT use in their classroom teaching, including language skills development.

Mishra and Koehler's (2006) primary contribution is to make this information apparent and relevant to the demands and complexity of teaching in the twenty-first-century digital classroom. This integrated framework supports teachers in planning, delivering, and assessing instruction in technology-rich educational environments.

In the context of this study, this framework closely aligns with its purpose: exploring secondary–level ELT teachers' perceptions and lived experiences of integrating ICT into writing instruction. The narratives from the participants in my research indicated that the use of ICT tools like projectors, YouTube, PowerPoint presentations, Google Docs, Messengers, and digital boards is helpful for writing instruction for the students. These technologies were thus helpful to teachers in stimulating idea generation, facilitating brainstorming, encouraging collaborative writing, providing authentic materials, supporting revision, and providing instant digital feedback. These classroom practices demonstrate the interaction of technological, pedagogical, and content knowledge, reflecting the core principle of the TPACK framework.

The participants' narratives showed that the teachers' ICT competence developed gradually through self-learning, classroom experience, collaboration with colleagues, and increased use of digital technologies during and after the COVID-19 pandemic. Their experiences suggest that meaningful integration depends not only on technological skills but also on teachers' pedagogical knowledge, confidence, and classroom experience, reflecting the core principles of the TPACK framework (Mishra & Koehler, 2006)

Therefore, the TPACK framework provides an appropriate theoretical foundation for interpreting teachers' perceptions and experiences of ICT integration in writing instruction. It enables this study to examine how teachers combined their knowledge of English writing, instructional strategies, and digital technologies to design meaningful learning experiences for students

Social Constructivist Theory

In my research, Social Constructivist Theory, developed by Lev Vygotsky (1978), serves as a foundational lens for examining how secondary-level English language teachers perceive and experience the integration of ICT into writing instruction. According to Vygotsky, learning and knowledge are socially constructed through interaction with others and influenced by cultural and contextual factors (Vygotsky, 1978). Besides, this theory emphasizes that learning occurs when learners actively engage with their surroundings (teachers, peers and various cultural tools) through meaningful dialogue and participation, rather than solely through individual cognitive processes (Mafhfiroh & Muttaqin, 2025).

I found this aligns with my research too, because teachers' ICT perceptions and practices are not developed in isolation. Instead, their thoughts, beliefs, attitudes, and experiences are shaped by interactions with colleagues and school leaders; professional development and training opportunities; collaboration with students during writing activities; institutional policies; technological availability; and cultural and educational contexts.

Similarly, social constructivism views teachers as facilitators who create meaningful learning through discussion, questioning, collaboration, and guided participation (Kraatz et al., 2020). This approach also focuses on teachers as active participants who support learners in gaining understanding and in making meaning from the surrounding environment to express how knowledge is constructed. Learning, therefore is understood as an active and collaborative process in which learners construct knowledge together while interacting with teachers. This perspective aligns closely with ICT- supported classrooms, where technology provides multiple opportunities for communication, collaboration, and shared knowledge construction.

Besides this, the central concern of the Social Constructivist Theory is the Zone of Proximal Development (ZPD), which according to Vygotsky (1978) is a gap between what learners can achieve independently and what they can achieve with the guidance of a more knowledgeable person. Within the ZPD, teachers provide scaffolding, temporary support that helps learners accomplish tasks they couldn't yet handle on their own (Bruner, 1966). As learners build confidence, understanding, and competence, this support is reduced, allowing them to work more independently. In the context of my research, teachers scaffold students' writing through digital tools by providing timely feedback, and facilitating collaborative learning. Similarly, my research participants, the secondary level teachers own ICT integration perceptions and practices, were developed through professional development, collaboration and interactions with colleagues and students. This way, ZDP offers a comprehensive understanding of how teachers and students co-construct knowledge and develop competence in technology- enhanced writing practices.

Similarly, the use of ICT tools such as Microsoft Teams, Google Docs, learning management systems, online discussion forums, and other collaborative platforms creates opportunities for peer collaboration, collaborative writing, formative

feedback, and shared meaning-making throughout the writing process (Vicentini & de Oliveira, 2018; Warschauer & Ware, 2006). These technologies also enable teachers to scaffold students' learning providing timely feedback, modelling writing strategies, facilitating peer interaction, and supporting learners as they gradually become more independent writers.

This research also examines how teachers perceive their evolving role, shifting from knowledge transmitters to facilitators who guide, support, and scaffold students' learning through digital technologies. The participants' narratives revealed that teachers frequently encouraged brainstorming, group discussion, collaborative writing, digital feedback, and revision through ICT tools, reflecting the principles of Social Constructivism.

Besides, their experiences also demonstrated a shift in teachers' roles from knowledge transmitters to facilitators who guide, support, and scaffold students' learning through digital technologies. Furthermore, the participants' narratives revealed that their own learning and professional development also reflected Vygotsky's theory. Rather than depending wholly on formal training, many teachers reported learning through collaboration with colleagues, observing other teachers, watching YouTube tutorials, participating in online training during the COVID-19 pandemic, and experimenting with digital tools in their own classrooms. This professional achievement was therefore socially mediated and developed through continuous interaction with colleagues, digital communities, and practical classroom experiences. This highlights that Social Constructivism applies not only to students' learning but also to teachers' professional learning and adaptation to educational technologies.

Therefore, Social Constructivism provides a strong conceptual framework for understanding teachers' lived experiences of ICT integration into writing instruction. It explains how ICT supports collaboration, scaffolding, peer interaction, dialogue, feedback, and the co-construction of knowledge throughout the writing process (Vygotsky, 1978). More importantly, it shows how teachers gradually adjusted to using ICT, learned through social interaction and professional collaboration to create learner-centered classroom despite various contextual challenges. Therefore, this theory provides a comprehensive foundation for understanding the complex

relationship among teachers' perceptions, classroom practices, contextual realities, and ICT- supported writing instruction explored in this study.

Gap Analysis

A review of existing literature from Nepal and other contexts reveals that that numerous studies have explored teachers' general perceptions and experiences of using ICT to teach writing skills in English language classrooms. However, most scholars explored multiple subjects or general language skills rather than writing specifically. While a few studies have been conducted in Nepal on the use of ICT in ELT classes, they tend to treat writing as one of several skills rather than exploring it in depth. They demonstrate that ICT integration in English language teaching has been examined from various perspectives and in different contexts. Internationally, Raygan and Moradkhani (2022) investigated Iranian EFL teachers' attitudes, TPACK, and educational climate and found that teachers' technological knowledge, attitudes, and institutional environments influenced technology integration. Similarly, Wang (2022) examined EFL teachers' TPACK and technological confidence, while Mali and Salsbury (2022) specifically explored technology use in an Indonesian university writing classroom and found that technology supported different stages of writing process. These studies provide important evidence on technological knowledge, attitudes, and technology- supported writing; however, much of this research has been conducted outside Nepal, often in higher- education settings.

Within Nepal, Bhattarai (2021) explored secondary-level English teachers' experiences of ICT integration and reported that teachers perceived ICT as useful for language teaching despite various challenges. Similarly, Saud and Laudari (2023) examined English teachers' lived experiences of ICT integration and highlighted the influence of teachers' professional experiences and contextual conditions. Other Nepali studies have primarily examined teachers' ICT competency, perceptions, access, and challenges in general English language teaching. Thus, although ICT integration in ELT has received increasing attention in Nepal, how secondary- level English teachers perceive and experience it, particularly in teaching of writing, remains underexplored.

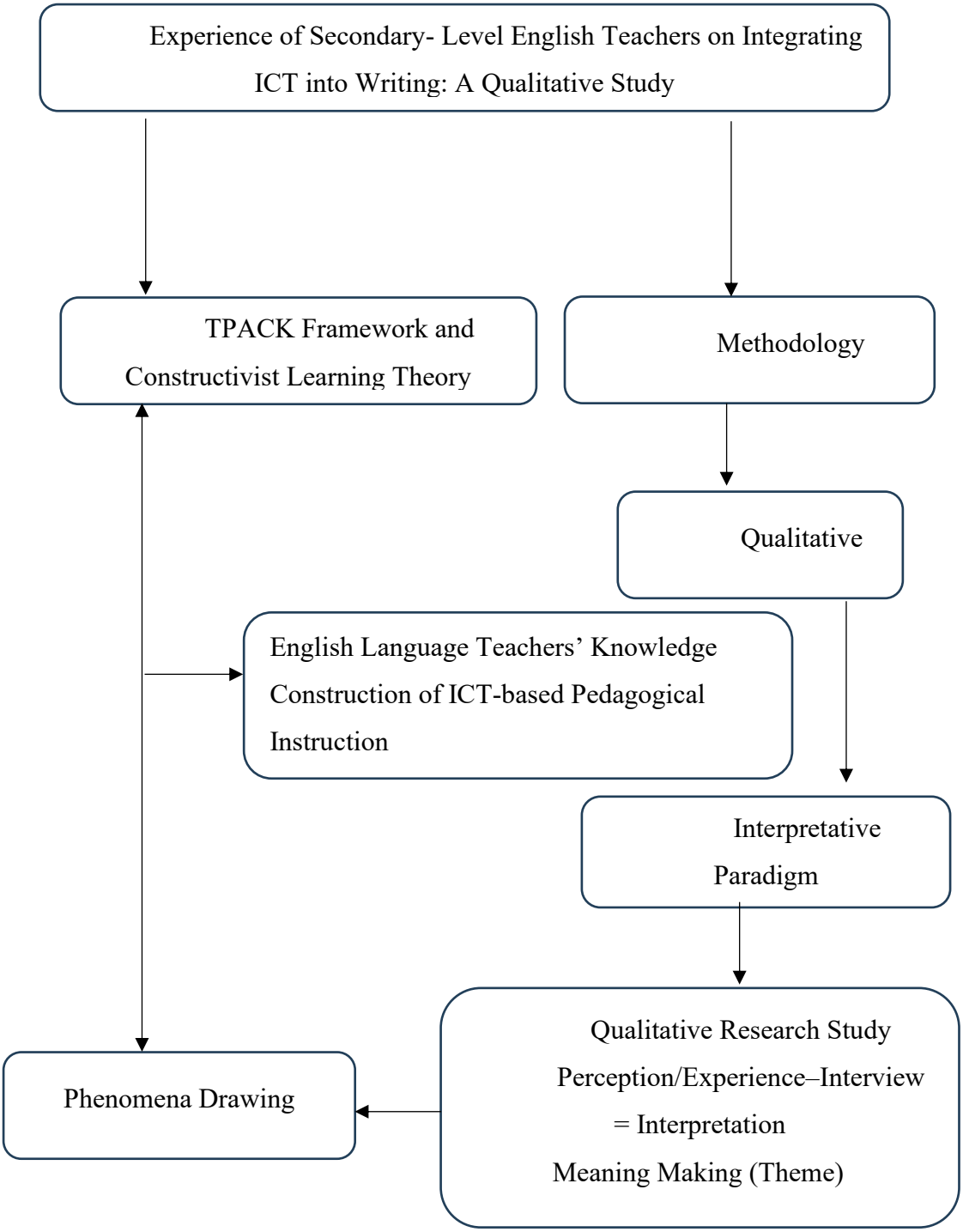
A further methodological gap is evident. Previous studies have largely employed surveys, quantitative approaches, or phenomenological studies to investigate teachers' ICT competence, attitudes, and experiences. Consequently,

limited attention has been given to teachers' individual stories and how their experiences of using ICT in writing instruction have developed over time and within particular school setting. This is particularly important because teachers' ICT practices may be shaped by their professional backgrounds, access to technology, institutional environments, training, and classroom experiences.

This shows a substantial gap in the literature, underscoring that ICT integration into writing instruction remains an unexplored area. Thus, this study addresses these contextual, pedagogical, and methodological gaps through a qualitative research approach into secondary-level English Language Teachers' perceptions and experiences of integrating ICT into writing instruction in Nepal. Specifically, the research questions examine the following: (RQ1) How do secondary-level English language teachers perceive the integration of ICT into writing instruction? and (RQ2) How do secondary-level English language teachers narrate their experiences of practicing ICT integration into writing instruction?). The first question addresses teachers' perceptions of ICT in writing instruction, while the second examines their actual experiences, practices, opportunities, and challenges in integrating ICT into writing instruction, bringing context-specific insights to the broader field of English Language Teaching.

Conceptual Framework

The conceptual framework of this study provides a structure for exploring secondary- level English teachers 'perceptions and experiences of integrating ICT into writing instruction. It connects key concepts of the study, teachers' perceptions, ICT integration, writing instruction, classroom practices, contextual factors, methodology, theoretical framework and data collection procedure and guides the exploration of the research questions. This framework helps to examine how teachers perceive the role of ICT in writing instruction, how they experience its integration in their classroom practices, and what factors shape those experiences. Thus, it serves as a guiding structure for collecting, analyzing, and interpreting the participants' narratives in relation to the research question.


Experience of Secondary- Level English Teachers on Integrating ICT into Writing: A Qualitative Study
TPACK Framework and Constructivist Learning Theory
Methodology
Qualitative
English Language Teachers' Knowledge Construction of ICT-based Pedagogical Instruction
Interpretative Paradigm
Qualitative Research Study
Perception/Experience–Interview
= Interpretation
Meaning Making (Theme)
Phenomena Drawing

Chapter Summary

In this chapter, I discussed the current status of ICT integration within Nepal's epistemic spectrum grounded in the existing literature. I reviewed various (thematic, empirical, policy, and theoretical) literature that was relevant to my study. In this chapter, I discussed the TPACK framework and constructivist learning theory which I used to frame my study. In addition, I reviewed the ICT policies and practices in the context of Nepalese education. Moreover, the previously reviewed studies helped me explore the research gap in my study. The thematic review in this chapter supported this study's exploration of ICT in education worldwide, thereby expanding my knowledge of current ICT integration practices across the global epistemic spectrum. The literature indicates that teachers face various challenges implementing ICT-integrated educational activities. However, they are lured to practice it anyway. The discussion paved the way for me to explore ICT-related perceptions and experiences among language-learning practitioners, specifically regarding the enhancement of learners' writing skills.

CHAPTER III
RESEARCH METHODOLOGY

This chapter presents the research methodology employed in this study. It contains a discussion of the philosophical considerations maintained in this study, in which the ontological, epistemological, and axiological stances of my research are examined. Furthermore, this chapter presents the research paradigm, design, approach, tools, and techniques employed in this study. Moreover, it contains information about the data analysis and interpretation. In addition, it presents the quality standards and ethical considerations I have maintained throughout my research.

Philosophical Considerations

Philosophy sets the foundation for the interpretation of reality in research. Research, according to Creswell (2014), is a process of collecting and assessing information to understand a topic or situation. He further says that the research process consists of three steps: formulating a question, gathering information to address the topic, and creating a solution to the formulated question. Various considerations are examined in a study to explore solutions to the stated problems. Among such considerations are philosophical stances, which allow a researcher to view reality through a particular philosophical lens.

In this, Scott and Usher (2011) argue that philosophical problems are essential to the research process and cannot be ignored. Thus, during research, philosophical perspectives are crucial because they shape the study's trajectory. In other words, it influences every step of the research process, including topic selection, formulation of research issues, questions, and objectives, paradigm selection, and research methodologies (Creswell, 2012). So, to build the basis for interpreting the reality in my study, the following were the philosophical considerations:

Ontology

Ontology is a part of a branch of philosophy. Barbour (2011) defines ontology as a viewer’s perspective on what constitutes the social world and how to study it. So, it is the theory of reality, and it cannot be the same for all, meaning diversity in reality. So, in this study, I also believe in the subjective reality of my research participants. In other words, participants’ perspectives and experiences regarding

technology integration for writing skills were subjective. I allowed it by respecting their freedom, independence, constructed knowledge, and making or finding contextual meaning.

As a relativist, I do not believe in the absolute truth. So, I respected my research participants' multiple realities in technology integration in writing. So, discarding the idea of absolute truth, I stood for multiple realities shaped by social, political, economic, cultural, ethnic, and gender values. Since the reasons for using technology in teaching writing can be influenced by such values, I need to trust the participants' subjective accounts. As Richards (2003) defines ontology as the science that studies the nature of reality and its stances, my ontology falls under the interpretive paradigm. In this study, I explored my participants' perceptions and experiences of using ICT to teach writing skills, embracing their views, stories, and experiences without distorting them to capture reality.

Epistemology

Epistemology is the study of how we know reality. Knowledge is at the center of epistemology. What knowledge is and how it is acquired are the primary concerns of epistemology in philosophy, where epistemology questions what in the world constitutes knowledge and how we know the truth. In other words, epistemology analyzes the character of knowledge (Richards, 2003). So, epistemology is concerned with the foundations of knowledge, as well as its nature, structure, methods of acquisition, and interaction with others. Willis (2007) claims that a person's subjective view of their surroundings and their subjective knowledge both affect the truth.

In this research, knowledge was constructed and derived through interpretation, experience, and interaction. For instance, interviewing English-language teachers is a form of interaction that generates new meanings regarding the use of ICT in teaching writing skills. I adopted an interpretivist epistemic position to understand the nature of reality in using ICT for teaching and learning. Believing that the context may prevent a person's perspective from being objective because no two persons have the same experiences, difficulties, or methods of problem-solving, I tried to generate the meaning as it is experienced by the participants as suggested by Moon and Blackman (2014) who guides to embrace subjectivist epistemology allowing the research participants to express reality in a comfortable language and interpret it on their way.

Axiology

Axiology is the theory of values. It also deals with ethics, human values, and value judgments, as well as truth and worth (Richards, 2003). The value of people is relative. In other words, every individual is different, as the context always impacts their values. Henceforth, I believe that the environment around them influences their reality. In this, Cohen et al. (2007) argued that an individual creates, modifies, and interprets the world in which he or she finds himself/herself. So, in my research, I incorporated all participants' ways of thinking about the phenomenon under study. Thus, this research emphasizes the participants' multiple values regarding the use of ICT in ELT.

So, as axiology concerns the moral considerations the researcher needs to uphold while designing the study, this study respected the participants' experiences, perceptions, attitudes, and values. Believing that each person has a unique experience, cultural background, and environment, I found that their values will vary; as a researcher, I respectfully counted the values my participants shared in this study.

Research Paradigm: Interpretivism

The research paradigm is the basis of research, providing a framework for study. In a study, a researcher's preferred paradigm influences the conceptualization of reality and shapes the understanding of how things are interconnected (Lincoln et al., 2011; Creswell, 2007). It plays a vital role in decision-making during the study process, including methodological preferences and how researchers will gather data and construct meaning from it (Willis, 2007, as cited in Nguyen, 2019). In this study, I used the interpretive research paradigm.

The key tenet of the interpretive paradigm is the construction of reality through society (Bogdan & Biklen, 1998), adopting an ontological stance of relativism. It studies the distinctiveness of individuals, different opinions, and attitudes (Cohen et al., 2007) through a subjectivist epistemology, i.e., a researcher needs to interpret the data collected through interactions with participants and make meaning by applying his/her own thinking and cognitive processing. In this regard, Taylor and Medina (2013) claim it is a humanistic paradigm that helps a researcher learn to stand in the research participants' shoes, look into their eyes, understand their weal or woe, and comprehend them as the culturally different other.

So, this paradigm engaged me as a reflective practitioner and researcher in gaining a deeper understanding of participants' economic, social, historical, and political life-worlds (Taylor & Medina, 2013). The interpretive paradigm in my research was the reflection of the real world of subjective knowledge and subjective reasons of the participants about their making the use of ICT tools in teaching writing skills to grade 11 and 12 students.

Based on an interpretive paradigm, I explored my research participants' subjective truths about the phenomena examined in this study. I analyzed the participants' narratives about the phenomenon to derive meaning in the context.

Qualitative Study as My Research Method

Qualitative research is an approach to inquiry that explores how people make sense of their own experiences in response to their social and cultural settings and give meaning to social phenomena, rather than measuring or generalizing things to apply the finding to everyone (Cohen et al., 2018). Its strength lies in depth and context, since it treats knowledge as situated and co-constructed between participants and researchers (Creswell & Báez, 2021). In my study, I adopted qualitative research approach to explore how four secondary English language teachers make sense of their perceptions and experiences on integrating ICT into writing instructions. This Through their stories, I explored how their beliefs, professional learning, interactions, and school contexts shaped their perceptions and practices. Semi-structured interviews provided opportunities for participants to describe their experience in their way own word and for me to ask follow-up questions to clarify their meanings (Creswell & Poth, 2018)

According to Creswell and Báez (2021), qualitative researchers are not neutral outsiders. They help shape the meaning of the findings through how they work with participants and data, so they need to reflect on their own role and background and be open about it. Interpretation is therefore central: findings are not simply "found" in the data but are actively developed through the researchers' engagement with participants' accounts, which makes reflexivity about researchers' own assumptions and positionality essentials (Denzin & Lincoln, 2011) In this study, I recognized that my teaching background and experiences with ICT influenced how I interacted with participants and interpreted their narratives. I reflected on my assumptions throughout the research process and remained open to experiences that differed from my own. By

maintaining reflective notes and discussing my interpretations with participants, I tried to represent their experiences faithfully while acknowledging my role in shaping the findings.

For the analysis of the qualitative data, thematic analysis is one of the most widely used methods for this work, and it involves familiarization with the data, generating codes, constructing and refining themes, and producing a coherent analytic narrative (Braun & Clarke, 2006). In this study, I analyzed the interview data using six-phase thematic analysis process outlined by Braun and Clarke (2006). I familiarized myself with the transcripts, generated initial codes, searched for themes, reviewed the themes, defined and named them, and produced the report. Throughout this process, I examined shared patterns and differences across participants' accounts, developing themes that addressed my research questions.

I also recognized that my background as a teacher, assumptions of being using ICT into my classroom teaching, and interactions with participants could influence my interpretations. For that reason, reflectivity involved examining how my own perspectives shaped my understanding of their accounts (Denzin & Lincoln, 2011). To support the credibility and transparency of the analysis throughout the study, I checked my interpretations against the interview data and used relevant quotations to connect the findings with participants' perspectives. This way, the study aimed to provide a detailed, context- sensitive understanding of these teachers' experiences, rather than statistically generalize the findings to all teachers (Tracy, 2010).

This way taken together, interpretation, thematic analysis and critical perspectives of my research participants supported this qualitative study that are rigorous, reflexive and responsive to participants' lived realities (Creswell & Báez, 2021).

Study Site and Participants

I conducted this study in Bhaktapur district, Nepal. I chose community schools as my research site because the phenomena explored in the study that prompted me to conduct this research occurred in community schools. I purposively selected four English language teachers with more than 11 years of teaching experience in grades 11 and 12 in the community schools as my research participants. I also ensured that they had been using ICT in their pedagogical practices, specifically in writing instruction. I purposively selected this site because it provides a suitable educational

context for exploring secondary-level English teachers' perceptions and experiences of integrating ICT into writing instruction. This district has schools where teachers have access to and experience with different forms of digital technology in their teaching practice. Selecting Bhaktapur also gave me access to participants with relevant experience and allowed me to explore their practices, opportunities, and challenges in their actual school contexts.

Besides, employing qualitative research study as a research method, I needed rich data to meet my research objectives. To ensure my participants had ample stories to tell so I could grasp their enriched perceptions and experiences of the phenomena, I needed to collect data from experienced teachers. For that, I followed Creswell and Poth (2018), who stated that the data needs to be explored in sufficient depth. They suggested that data from several participants could not be explored in depth, so I collected data from only four participants to address my research questions. Therefore, this site was considered appropriate for addressing the research question through an in-depth qualitative research inquiry.

Information Collection Tools and Technique

As I employed qualitative research inquiry in this study, I focused on exploring sufficient narratives of my participants to meet my research objectives. In qualitative research inquiry, open-ended questions help excavate participants' perceptions and experiences of a particular phenomenon (Johnson & Christensen, 2020). For this purpose, I used semi-structured interviews as a suitable research technique, as Schmidt (2004) suggested, since they maintain the essence of qualitative research. In this regard, Richards (2003) also suggested that an interview is a journey into participants' lived reality rather than merely a means of obtaining answers.

Thus, to collect and record participants' narratives about the phenomena examined in this study, I used open-ended questions. For better exploration, record-keeping, and note-taking, I used a notebook, a pen, and a recorder as research tools, along with the interview guidelines. So, after being sure that this technique and tool would be suitable for collecting information for my study, I developed some probing questions related to my research questions, which I assumed would help explore my participants' narratives. To mention some, I had kept in Annex.1:

The questions helped me generate additional questions to explore the research phenomena in this study. They supported me in conducting effective interviews that

yielded rich data to address my research questions. In other words, the discursive and exploratory questions formed during the interviews helped me with data saturation in this study.

Analysis and Interpretation

In this research, I used the data analysis and interpretation process that is appropriate for a qualitative research study. For data collection, I purposively selected the participants using the specified procedure for the study site and participants. First of all, I informed them about my visit to them on phone calls and in person. Then I asked them for permission to proceed with the work. After they gave me their consent, I began building rapport with them to collect accurate information. Then, after assessing their comfort levels, I began interviewing them using my data collection tools and techniques. In the interview, I used their preferred language, Nepali at their convenience. After the data was collected, I transcribed and translated it, then began coding and analyzing it.

As this study employed qualitative research study as its research method, I used the data analysis process suggested by Braun and Clarke (2006). As per their suggestion, my data analysis began with the participants' experiences as the central focus for the inquiry. In this stage, I collected stories through field texts, including interviews, journals, and conversations, and read them repeatedly to understand their experiences within their personal, social, and temporal contexts. I then, transcribed the interviews and translated them from Nepali into English, maintaining participants' voices and intended meanings. I then read the transcripts repeatedly to become familiar with their experiences and coded significant ideas related to ICT integration in writing instruction. Next, I re-storied each participant's experiences into a coherent narrative, preserving their sequence and context. I examined these narratives to identify shared threads and distinct experiences within and across participants' stories. Throughout this process, I moved back and forth between the codes, themes, and original transcripts to ensure that my interpretations remained grounded in participants' accounts (Cohen et al., 2018; Creswell & Báez, 2021). Finally, I checked my interpretations with participants and connected their experiences with relevant theories and literature. Throughout the analysis, I considered interaction (personal and social), continuity (past, present, and future), and situation (place). These dimensions helped me interpret how participants' experiences of ICT integration in writing

instruction were shaped by their personal histories, professional and social contexts, change over time, and the particular settings in which their experiences occurred.

Quality Standards

Quality standards play a pivotal role in the proper conduct of a study. It supports researchers in demonstrating their efficiency not only in data analysis and interpretation but also in conducting research professionally from start to end. There are various ways to maintain quality standards across different types of research. As my research followed the interpretive paradigm, I maintained the standards of credibility, transferability, dependability, and confirmability, as suggested by Lincoln and Guba (1985), as cited in Koch and Harrington (1998), to ensure the accuracy and trustworthiness of this research. The following section describes the standards maintained throughout the study and the measures undertaken to ensure them.

Credibility

Credibility measures the truth value of qualitative research by ensuring the accuracy of research findings. It determines whether study findings represent credible knowledge derived from participants' original data and accurately reflect participants' initial views (Lincoln & Guba, 1985). Thus, to maintain credibility, I was honest with myself about my narratives and experiences, as well as what I learned from others. Moreover, I conducted a thematic, theoretical, empirical, policy, and literature review of authentic artifacts, taking into account the tales presented without any changes for my needs. My techniques for credibility include extended involvement, constant observation, and data triangulation.

Transferability

Transferability is another significant quality standard that helps a researcher to maintain the accuracy and trustworthiness of the study. It determines if the study findings are applicable and distinct from those of others in an educational environment. This way, it concerns how proficient readers can assess the usefulness of their findings to other researchers in their field (Tracy, 2010). To ensure the transferability of my research, I reviewed prior studies and collected field data. I also provided the participants' exact contexts in rich, comprehensive descriptions to make the findings relevant; actual data were supplied so that the findings may be applied to different circumstances.

Dependability

Dependability is also a standard to maintain in a study that follows the interpretative paradigm to ensure the study's trustworthiness. It allows data stability over time (Guba & Lincoln, 1989). In other words, this standard allows the data to remain the same across different research studies involving the same participants. Thus, in my study, I kept notes and records and participated in peer debriefings to maintain a high standard of dependability.

Confirmability

Along with credibility, transferability, and dependability, I also ensured confirmability in my study to establish the trustworthiness of this research. To ensure confirmability in my study, I interpreted the data based entirely on the research context and the people concerned, following Guba and Lincoln (1989), thereby ensuring data consistency. For this, I followed member checking, noting and analyzing the findings in my research. Such activities also helped me to check for bias in my research and reanalyze if needed.

Accuracy and trustworthiness are crucial in qualitative research studies, as they help ensure a study is free from bias. Henceforth, I ensured the accuracy of this study by systematically organizing, codifying, thematizing, and interpreting the data. Furthermore, I let my participants recheck the data they provided and illustrate it after analysis. Moreover, I established the authenticity of my research and triangulated the data. Fairness and ontological authenticity were used in my research while exploring the participants' voices. My prolonged engagement and continual observation in the study and with the participants helped me develop and maintain rapport and trust with the participants. On the other hand, it helped me remove any disinformation and factual distortions regarding the subjects under study.

Ethical Considerations

It is vital to uphold ethical considerations during research, as research affects other people (Tracy, 2020). It guides the research practices to conduct a study efficiently and ethically. In this study, I ensured that the ethical standard of informed consent was upheld by collecting data from participants honestly and with their consent. Moreover, I maintained confidentiality to protect my participants' privacy, as I needed to keep sensitive personal, professional, and institutional information unexposed. To ensure their anonymity, I gave all participants pseudonyms and

omitted any identifying information, such as their names or the names of the schools where they work.

Moreover, I respected autonomy by allowing participants in my research to remain in the study until the end or to discontinue participation at any point. Finally, I also ensured that the principle of justice is one of the ethical standards in my study. To do so, I gave justice to each participant in my research project. I treated participants differently based on their gender, race, religion, qualifications, or experience. All study participants received equal consideration, and I continued to incorporate their views into my findings.

Chapter Summary

In this chapter, I discussed the methodological framework of my research project. I used the interpretive research paradigm because ELT teachers have diverse stories, life experiences, sentiments, and perspectives on teaching creative writing skills. Adopting a qualitative research technique, I was conscious that epistemology is embedded in the context of my participants' real-life accounts of encounters with the phenomena. Then, information is generated through exchanges between me, as a researcher, and English-language teachers working in the remote highlands. In the research study, I used qualitative research technique to uncover the essence of Secondary-Level English Teachers' lived experiences, feelings, attitudes, beliefs, and perspectives on teaching creative writing in EFL/ESL classrooms in the Bhaktapur District.

CHAPTER IV
PERCEPTION ON ICT INTEGRATION INTO TEACHING WRITING

In this chapter, I present an analysis of data collected from research participants through interviews to answer the research question: How do secondary-level English Language teachers narrate their perceptions of integrating ICT into teaching writing skills? Here, I have thoroughly analyzed the collected data thematically, with reference to the earlier literature and the theories discussed in the previous chapters.

Following qualitative research inquiry as a research method, I conducted semi-structured interviews with the participants, Shiva, Jamuna, Deepak, and Maya (pseudonyms) to explore the research phenomena undertaken in this study. The participants narrated their perceptions and experiences based on their years of long work in their schools. While selecting them, I confirmed that their teaching experience exceeded 11 years in community-based schools in the Bhaktapur district.

My first participant, Shiva, began teaching after completing a Bachelor's degree in Education, with English as his major. He worked in a private school for approximately two years before joining a rural community school, where he had taught for ten years. Most students came from economically disadvantaged families with limited access to technology. Initially, he relied on textbooks, blackboards, and notebooks; he gradually adopted smartphones, PowerPoint, YouTube, Google Docs, and messaging applications, particularly following the COVID -19 pandemic. His ICT skills were developed mainly through dependent learning and support from colleagues, supplemented by short training programs. He described himself as moderately confident, although unreliable internet, power interruptions, a shared projector, and unequal access to devices restricted his practice.

Second participant, Jamuna, also started teaching after completing her Bachelor's degree and continued after earning a Master's degree, accumulating approximately ten to twelve years of experience, including three years of teaching in grades eleven and twelve. She used projectors, videos, audio recordings, and presentations, but reported no formal ICT training and learned mainly through observation, independent exploration, and colleagues. Although she was initially uncertain about ICT, especially for writing, she described using videos to stimulate

discussion, essay writing, and reflection. Her confidence remained limited by unfamiliarity with advanced applications, inadequate technical support, unreliable connectivity, and shared equipment. She valued technology and its contribution to engagement and access to writing resources. However, she also expressed concern about copying and reduced independent thinking.

The third participant, Deepak, had more than 12 years of English-teaching experience at the same rural community school, having begun regular teaching after completing his Master's degree. His students mainly came from middle- and low-income families, and he had witnessed a gradual improvement from minimally equipped classrooms to greater access to technology. Before COVID-19, he used audiovisual materials and printed online writing templates; subsequently, he expanded his use of PowerPoint, YouTube, and Google Docs for drafting, commenting, and revision. Most of his ICT knowledge came from self-learning, colleagues, and a brief online teaching orientation. He felt confident with basic tools but faced unreliable internet, limited technical support, and unequal access to devices.

Fourth participant, Maya, began teaching after completing her Bachelor's degree, continued while pursuing her Master's degree, and accumulated nearly 15 years of secondary-level English teaching experience. She gradually moved from traditional materials to projectors and digital boards, learning through self-study, school orientations, colleagues, and her husband, an educational resource person. Her school provided projectors in most classrooms and recently introduced digital boards. Although moderately confident, she needed further practical training and more reliable technological support. However, she valued technology while emphasizing creativity, critical thinking, and independent writing.

As this study was axiologically value-laden, I respected all of the research participants' subjective realities. In this study, their ways of perceiving the practice or society have been acknowledged. While collecting the data, I ensured their convenience, as the participants' narratives were expected to remain unaffected by any intervention. To do so, I had already informed them about the interviews on phone calls before meeting them in person for my purpose. Thus, I met all the participants at their comfort level regarding place and time, so they could express their perceptions and experiences freely. In addition, I observed their classroom practices to explore how they integrate ICT into their teaching, especially in writing.

The collected data were, later, transcribed, coded, and thematized. The emerging themes, then, are interpreted by placing them appropriately in the coming pages. So, this chapter addresses the first research question: 'How secondary level English language teachers perceive ICT integration into writing skills?' This chapter contains four superordinate themes, each with three subordinate themes. The subordinate themes are built to justify the superordinate theme in detail and with precision. The second research question, 'How do secondary level English language teachers experience ICT integration into writing skills?' will be answered in the next chapter.

Teachers' Conceptualization of ICT in Writing Instruction

Teachers' understanding of ICT plays a key factor in shaping teachers' perceptions of integrating ICT into the teaching of writing skills. ICT is generally understood as the use of digital technologies such as computers, the internet, smartphones, projectors, interactive boards, educational software, and online platforms to support teaching, learning, communication, and information sharing (Sarkar, 2012).

Aligning with scholars such as Sarkar (2012), I explored participants' understanding of the ICT tools mentioned above. By exploring their narratives in this regard, I uncovered the teachers' perceptions of ICT use for writing instruction in ELT classrooms. Believing that the use of ICT tools in writing instruction is vital these days, as it promotes productivity in classrooms, I intended to explore teachers' views on it in this research.

With the rapid advancement of digital technologies, teachers are expected not only to use technological tools but also to understand how to meaningfully integrate technology into their pedagogical practices. Consequently, teachers' conceptualization of ICT has become an important area of educational research because their understanding influences how technology is implemented in classrooms and how effectively it supports students' writing development (Mishra & Koehler, 2006).

In this study, the participants shared their views on ICT integration in writing instruction. Shiva, a participant, said, *"ICT is an important means of making teaching writing effectively meaningful."* He further added, *"But the infrastructural challenges hinder us from using the necessary tools."* He continued, *"The technology is very*

impactful if we properly utilize it in the ELT practices; however, it is challenging at the same time because we lack readiness for numerous reasons, such as training." Similarly, Deepak shared his thoughts, *"Using technological tools such as Microsoft Word, PowerPoint, etc. in education is ICT integration in education."* He added, *"Using the internet for writing is fruitful for writing indeed."*

In line with both participants, Jamuna also highlighted, "*I used basic tools like online videos through a projector, which is insufficient."* She noted, *"We need to be trained for such activities and provided with ample facilities."* In the same way, Maya added, *"Things like projectors and videos are very basic ways of ICT integration."* While criticizing the Nepali educational system, she further said, *"The necessary infrastructure and training are to be provided for schools and ELT practitioners for better results."* Based on participants' understanding, secondary-level teachers from community schools have a basic yet good understanding of ICT integration in teaching writing in ELT classes.

However, teachers' understanding of ICT goes beyond just identifying technological tools. It includes their views on the purpose of technology, how they believe it can support students' learning, and the ways they integrate technology into pedagogical practices (Ertmer, 2005). So far, I believe that teachers who perceive ICT merely as a way to present information may use it primarily to display notes, videos, or model texts. However, teachers with an in-depth understanding of ICT could use technology more effectively, using ICT tools throughout the writing process, from brainstorming to writing, editing, collaboration, and feedback.

So far, I have found that this understanding can be illustrated using the TPACK framework developed by Mishra and Koehler (2006). This framework suggests that effective use of technology in teaching requires teachers to develop and integrate technological, pedagogical, and content knowledge (Koehler et al., 2011). Thus, this framework aligns with my study, given that meaningful ICT integration occurs when teachers not only know how to use digital technologies but also understand how these technologies can improve teaching approaches and support students' learning of specific subject matter.

While drawing on this theoretical perspective, through this theme, I tried to explore the narratives of secondary-level English teachers' understanding of how they

conceptualize ICT, the meanings they make of its integration in writing instruction, and how their perceptions influence their pedagogical practices.

Teachers' Awareness of ICT

As the world experiences rapid technological advancement, every sector is influenced by it, and education is no exception. In this context, Nepali education has also long sought to follow the worldwide practice of integrating ICT into education. While ICT is used in language teaching and learning in the classroom, the facilitator or teacher may hold various perceptions or attitudes.

All participants possessed a general awareness of ICT and recognized its growing importance in teaching and learning. However, I found that their perceptions varied in depth. I found that most teachers defined ICT in terms of basic technological tools such as computers, mobile phones, and the internet. In this regard, Maya explained that ICT refers to "*the use of the internet and computers for teaching and learning purposes."* Her expression showed her understanding of technology and her perception of how it can be used in ELT practices.

Another participant, Shiva, described ICT simply as "*using mobile phones in the classroom to search for answers from Google."* While sharing this view, his understanding could not delve into the vast array of ways technology is used in ELT practices. Likewise, Jamuna perceived ICT as "*using a projector and the internet in the classroom for teaching students' different lessons for better understanding."* She associated ICT with technology that enables access to information and learning resources. Her sharing indicated that she had a good understanding of the use of ICT in ELT classrooms for better ELT practices.

Along similar lines, Deepak explained, *"ICT means using technology in teaching."* He included computers, projectors, digital boards, the internet, and video, etc. within his understanding of ICT. His awareness was further reflected in his use of projectors, digital boards, and online resources in English language teaching. Unlike other participants, he named the ICT tools and their usefulness in English teaching and learning in the classrooms. His understanding justified the introduction of advanced technology in worldwide education.

The responses from all participants indicate that they were generally aware of the range of ICT tools and considered ICT a primary tool for information gathering or for delivering content to students, rather than as a pedagogical resource for supporting

writing growth, collaboration (Shields, 2011), or feedback. Thus, their understanding of ICT was largely tool-oriented, and this tool-oriented understanding among the teachers suggests that ICT is considered a supporting mechanism, as TPACK theory suggests, rather than an integral component of writing instruction.

In this regard, Jimoyiannis and Komis (2007) stated that teachers can have different attitudes. They also found that the teachers can be negative, positive, or neutral in the use of ICT in their school practices. However, teachers who better conceptualize ICT in their teaching practice can help students enhance their team learning and autonomy (Hakkarainen et al., 2001), resulting in better educational outcomes.

However, in a developing country like Nepal, the use of ICT in education is hindered by poor infrastructure, including basic hardware and electricity supply (Dhital, 2018). Thus, although teachers are willing to make educational practices more meaningful by integrating ICT into education, they face various complexities. Whatever, ICT conceptualization in education is advantageous for maintaining the quality of education, developing critical skills, expanding access, etc. (Shields, 2011). Despite numerous advantages, the Nepali education system is lagging behind in the proper adoption of ICT in education (Karki, 2019). In this study, the research participants have shared their views on the use of ICT for teaching writing in ELT classrooms.

Besides that, their responses mainly focus on teacher-centered instruction, in which ICT was used to present information rather than to support students' active participation (as constructivist theory assumes), creativity, or the development of independent writing (Hakkarainen et al., 2001). This indicates that while teachers demonstrated awareness of available technologies, their conceptualization of ICT remained largely functional rather than pedagogical, viewing it merely as a presentation aid rather than an integral component of writing instruction.

ICT and Teaching Writing

Among the four language skills, writing is one. The facilitators or teachers in ELT classrooms need to be aware of appropriate pedagogical activities to achieve better outcomes in the end. For instance, they need to be aware of their own writing strategies and those introduced by other practitioners. These days, due to the rapid development of ICT, it has become a useful tool for ELT practitioners to carry out

ELT activities more effectively. Thus, scholars such as Joshi (2017) suggest that the government, stakeholders, principals, and teachers use the technology daily in teaching and learning activities, as it helps them align with global trends in its use. While the global education system is pursuing the advanced use of Artificial Intelligence (AI), teachers in developing countries such as Nepal receive little ICT-related training (Rana, 2020). Despite such realities, Nepal invested a large budget in ICT integration in the Nepali education system (Karki, 2019).

Whatever the context, teachers in Nepal have recognized the importance of ICT in their teaching practices. Specifically, in teaching writing, it may have a different tendency. All participants demonstrated awareness of some commonly used ICT tools for teaching writing. They reported using sample texts from the online platform, as well as Microsoft Word, to type and edit the students' written texts. The participants demonstrated familiarity with the varied tools through their descriptions of classroom practices and their perceived usefulness in writing activities.

In this regard, Deepak stated, *"I use Google to download sample writings, such as the template for essay writing, book, film review, email writing, press release writing, etc., and show them to students so they can write in the same way."* This reflects resilience in model texts that do not integrate ICT into interactive or process-based writing practices. His expression showed how basic ICT use has been applied in ELT classrooms, especially in writing instruction.

In the same way, Maya explained, *"I use Microsoft Word to type students' paragraphs and correct their mistakes. When they see their errors, they become alert another time."* This response shows that the teacher primarily used ICT to edit and correct written work rather than to support the full writing process. Similar to Deepak's experience, Maya also used ICT tools in a basic manner. She did not integrate the available basic tools into her teaching writing process. Rather, she used it at the very surface of the writing process. As she could not mention other ways of integrating technology into her writing-teaching process, it has been shown that teachers try to use technology in their ELT practices but are unsure about the ideas and management.

Similarly, Jamuna also noted, "*We have a smart board in our class, so I sometimes show writing examples from YouTube videos, but students just watch and then write in their notebooks."* She added, *I use Messenger group to communicate*

with them and also created a group so that they can talk about academics." These responses suggest that the teacher was aware of various ICT tools, including the smart board, YouTube, and social media platforms, and used them to provide writing input and to encourage communication beyond the classroom. However, the primary use of these technologies remained focused on content delivery and information sharing rather than on promoting collaborative writing, peer feedback, or interactive engagement or follow-up activities to support the writing process.

Likewise, Shiva perceived ICT tools for writing as "*using the internet to download grammar exercises and giving them to students to practice writing."* This shows a focus on isolated language practice rather than process- oriented or communicative writing. The emphasis remains on mechanical language practice rather than on developing students' communicative and creative writing. In other words, Shiva also followed a similar path, using ICT tools in a limited way, as did the other participants in this study. His expressions *"downloading grammar exercise"* and *"give them to students for practicing writing"* highlight how constrained the teachers are in using the technology in their ELT practices.

These responses collectively illustrate that, while teachers are aware of ICT tools, their use remains largely functional and surface-level, with limited pedagogical integration into the writing process. Besides, although the ICT tools are available and occasionally used, teachers' practice remains largely teacher-centered, product-oriented, and constrained by limited pedagogical and technical knowledge. This indicates that ICT is often perceived as a supplementary teaching aid rather than a transformative tool for fostering collaboration, as Vygotsky's social constructivism proposes, as well as for creativity, revision, and the development of meaningful writing. It can be considered a poor use of ICT in teaching writing, according to the TPACK framework, which emphasizes that effective technology integration requires not only knowledge of technological tools but also an understanding of how those tools can be applied pedagogically to improve learning (Mishra & Koehler, 2006).

This study demonstrated that the teachers are familiar with numerous ICT technologies; nonetheless, their descriptions indicate a greater emphasis on technology knowledge than technological pedagogical expertise. It has also been found that ICT was largely used to provide writing models, examples, and language practice, rather than to support recursive writing processes such as planning, drafting,

rewriting, editing, and collaborative feedback, as explored in Flower and Hayes's (1981) study.

Teachers' Understanding of ICT for Basic and Pedagogical Integration

It has been observed that teachers in Nepal are encouraged to integrate ICT into ELT practices. However, they have been suffering from inadequate management and use of it, since Nepali classrooms are not yet ready. Despite a huge budget investment in ICT education, the pedagogical purpose has not been realized; rather, it is used for administrative purposes (Karki, 2019). In addition, infrastructural challenges and teachers' readiness pose major obstacles to proper ICT integration into the Nepali education system (Rana, 2020). While the teachers are not at a stage where they can readily facilitate their ICT-integrated pedagogical activities in ELT classrooms, such technological incompetence hinders their pedagogical competencies, as well as their personal-professional use and their use in class (Suarez-Rodriguez et al., 2018).

Thus, to conceptualize ICT practices in the ELT classrooms, the teachers need to be techno-friendly and competent in their pedagogical strategies. It is widely considered that the global education landscape has focused on the tangible potential of technology for meaningful and constructive classroom interaction (Rastogi & Malhotra, 2013). However, Nepal lags behind in implementing the policy sustainably and comprehensively in practice, with teachers lacking the necessary facilities (Rana et al., 2018). In this context, the participants in the study shared experiences that showed how they embrace ICT in pedagogical activities.

Shiva, a research participant, explained that he used ICT mainly to "*check spelling and grammar,"* but did not describe using technology to facilitate drafting, revising, or collaborative learning. This indicates that although he is aware of ICT, its pedagogical application remains limited. Similarly, He perceived ICT primarily as a tool for improving language accuracy rather than as a means of supporting the broader writing process. He could not mention how he used available online resources to enhance his students' writing skills in the ELT classroom.

Similarly, Maya shared, "*The computer can be shown for sample answers, and students try to follow the pattern."* This reflects a use of ICT for modeling writing, but not for engaging students in drafting or collaborative writing activities. It showed a teacher- centered approach in which technology serves mainly as a presentation tool

rather than as a medium for active student engagement. Another important observation regarding the teachers' understanding and perceived usefulness of ICT was their ability to distinguish between basic technological use and meaningful pedagogical integration in writing instruction.

Likewise, Deepak noted, *"Students can use the internet to find ideas, but I do not guide them much on how to use it for writing."* This response indicates awareness of the potential of digital resources, yet a limited understanding of how to strategically integrate technology to support writing development, and limited pedagogical integration despite awareness of ICT resources. Data from the interview show that all participants were familiar with ICT tools; only a few were able to demonstrate an understanding of how ICT could be meaningfully integrated into writing instruction.

In a similar vein, Jamuna remarked, *"ICT helps correct mistakes; use it to check students' writing because I can see and correct errors faster on the screen…humm… but I have not used it for group work or discussion in writing classes."* Her response highlights a reliance on ICT for effective feedback or error correction rather than for promoting interaction, collaboration, and process- based writing activities. Also, this indicates a teacher-centered use of ICT for efficient feedback, but not necessarily for interactive learning.

Taken together, these responses suggest that teachers' understanding of ICT remains largely functional rather than pedagogical. I found that, although the teachers are familiar with various technological tools and use them for activities such as typing, correcting grammar, and providing model responses, they rarely use ICT to facilitate the different stages of the writing process, including brainstorming, drafting, revising, editing, and collaborative learning. Consequently, the use of ICT appears to be mostly teacher-centered and product-oriented, with greater emphasis on demonstration and correction rather than on engaging students in interactive, process-based writing. As a result, ICT was generally perceived as a means of supporting existing teaching practices rather than as a tool for reshaping how writing is taught and learned.

Besides this, I found that this finding can be explained by Mishra and Koehler's (2006) TPACK framework, which suggests that effective use of technology requires not only knowledge of ICT tools but also an understanding of how to use them for teaching and learning. Although the participants were familiar with various

tools, their responses showed that technology was mainly used for preparing information, providing examples, and correcting errors rather than supporting learning throughout the writing process.

Similarly, Flower and Hayes' (1981) process writing theory views writing as a process that includes planning, drafting, revising, and editing. However, the findings revealed that ICT was mostly used to support the final written product rather than the different stages of writing. Therefore, while teachers are aware of ICT and recognize its usefulness, their understanding of how to integrate it pedagogically into writing instruction remains limited. Thus, the data in my research showed that ICT use is largely teacher-centered and focused on the final product rather than on the writing process itself.

Perceived Usefulness of ICT for Writing Development

As technological innovation advances rapidly worldwide, its influence is evident everywhere, and education is no exception. In this scenario, I believe it is important to know how teachers perceive the usefulness of ICT and how they integrate technology into their classroom practices. However, having access to digital tools alone does not guarantee that teachers will integrate ICT into their instructional practices. Instead, teachers' beliefs regarding the usefulness of ICT play an important role in determining their interest in integrating technology into their pedagogical practices (Charisma et al., 2025).

In the context of ELT, I observed that writing skills are considered one of the most complex skills. It is because it requires learners to go through various stages, such as generating ideas, organizing information, using appropriate vocabulary and grammar, and revising their work to produce meaningful texts. According to the National Curriculum Framework (NCF) 2019, at the secondary level of education, especially in grades eleven and twelve, I found that writing skills carry greater weightage in the English curriculum and national examinations (Curriculum Development Centre [CDC], 2019). Thus, I explored the teachers' views on the usefulness of ICT tools for teaching writing in this research

As writing has a larger role in ELT in Nepal and the influence of ICT is increasing day by day, I have observed that ICT has become a crucial asset for writing development, offering comprehensive support throughout the entire writing process. Besides, as an English Language teacher, I observed that digital technologies such as

computers, mobile phones, word processors, online dictionaries, presentation software, educational videos, and collaborative platforms give our students the chance to brainstorm ideas, organize their thoughts, draft, revisit, edit, and share their work more easily. These tools have given us (teachers and students) quick access to authentic materials, sample texts, vocabulary help, grammar guidance, and feedback from teachers or peers. This makes the writing process more interactive, engaging, and focused for the students (Hockly, 2018).

In the same vein, Flower and Hayesh (1981) also observed the value of ICT in writing instruction, through the process writing approach, which values writing as a recursive process involving planning, drafting, revising, editing, and publishing rather than a one-time product. Thus, I also believe ICT tools can support each stage of this process by enabling students to generate ideas, revise texts easily, collaborate with peers, and receive timely feedback. Thus, teachers who understand and experience these benefits use ICT not only to present information but also to facilitate meaningful writing experiences that encourage students' creativity, critical thinking, collaboration, and language development (Karunakaran & Aruldhas, 2021).

According to the TPACK framework by Mishra and Koehler (2006), effective ICT integration occurs when teachers integrate technological knowledge with their pedagogical and content knowledge. Therefore, I think teachers' perceptions of ICT usefulness extend beyond the availability of digital tools to understand how technology can improve writing instruction and students' learning outcomes.

Similarly, the UNESCO Global Monitoring Report highlights that digital technologies have the potential to enrich teaching and learning by increasing learner engagement, supporting collaboration, facilitating access to diverse learning resources, and promoting the development of essential 21st-century skills, including communication and writing, when integrated appropriately into pedagogy (UNESCO, 2023).

In this study, the participants perceived various uses of ICT for writing development. They generally viewed technology as a valuable tool for supporting students' writing development. For instance, one of the research participants, Deepak and Shiva considered it as *"a valuable tool that enhances students' writing by helping them generate ideas, organize their thoughts, revise drafts, receive immediate feedback, and collaborate with peers, making writing more engaging and*

meaningful". Similarly, Maya and Jamuna viewed it as "*an effective means for improving students' writing as it provides authentic resources, supportive writing tasks, provides good vocabulary, engages students, and fosters creativity*."

Shiva further explained how ICT helps generate ideas, organize thoughts, and revise writing, saying, *"ICT helps students generate ideas, organize their thoughts, revise their writing, and receive immediate feedback."* He also explained, *"For example, students can use spell-check features, search for vocabulary, and collaborate with classmates while writing."* This suggests that he perceived ICT as supporting several stages of writing, including collaboration and revision.

Further, Jamuna gave value of ICT mentioning ICT as helpful tool for assessing information, vocabulary and writing examples. She stated, *"ICT has a positive role. Students can access more information, learn new vocabulary, and see examples of different types of writing."* Likewise, Deepak valued ICT for its usefulness in making feedback and revision easier. He said, *"I ask students to write simple paragraphs and essays in Google Docs. Then, I provide feedback using the comment feature. Student can see their mistakes and make corrections more easily."* Another participant, Maya highlighted ICT's usefulness in supporting the writing process and stimulating ideas by saying, *"It can help students generate ideas, organize their thoughts, improve vocabulary, revise drafts, and present their writing more effectively."*

The above narratives suggest that participants associated with ICT with greater student engagement, motivation, and access to diverse learning resources and authentic materials. Their positive views may reflect the opportunities they perceived to make writing activities more engaging and to provide students with additional support. These positive perceptions broadly align with Thapaliya's (2014) study of secondary English teachers in Nepal, which identifies favorable attitudes towards ICT alongside constraints related to training and classroom time. This suggests that recognizing the value of technology and integrating it effectively are related but distinct aspects of teachers' experiences.

Likewise, Thapa's (2024) narrative inquiry highlighted teachers' perceptions of increased engagement and the importance of professional development, available resources, and peer support. However, Niroula (2023) reported that the availability of ICT equipment did not necessarily translate into effective classroom use because teachers lacked the skills, training, and administrative support. This suggests that

teachers' appreciation of ICT needs to be examined alongside the conditions that enable or constrain its use in writing instruction.

These accounts can also be interpreted through the TPACK framework, which emphasizes the relationships among technological, pedagogical, and content knowledge (Mishra & Koehler, 2006). From this perspective, ICT's value for writing instruction depends on how teachers connect digital tools with appropriate teaching strategies and specific writing needs.

In this context, the theme looks at how secondary-level English teachers view the value of ICT in enhancing students' writing skills. The interpretation, therefore, needs to consider how participants supported students' engagement, motivation, interaction, feedback, and revision, as well as how they supported students at different stages of writing and improved overall writing performance, which will be explored in the next section.

Engagement and Motivation

As the world embraces rapid technological development, it has become necessary for people to keep pace with ICT by continuously updating their knowledge and skills (Goldhammer et al., 2016). In such a context, educational practitioners cannot be overlooked. They need to be up to date with recent technological developments to continue enhancing their pedagogical activities, as using ICT in pedagogical practices optimizes students' engagement in learning (Sah et al., 2025). Consequently, this kind of awareness and readiness among educators shapes students' engagement in learning in the classroom (Zweekhorst et al., 2015). Scholars like Fraillon et al. (2014) have found that students use ICT to carry out their academic tasks in and beyond the classroom. Now, it is a pressing need to understand how teachers have been experiencing ICT-facilitated learning with their students in the classroom. Thus, this study explored teachers' perceptions of ICT use in education.

The research participants shared their views on the phenomena selected for this research. In this regard, one of the participants, Maya, shared, *"Students feel excited and interested when I show sample writing on the screen; students understand better how to organize their ideas."* Maya's narrative reveals that she perceives ICT as an effective tool for enhancing students' motivation and participation in writing activities. According to her, using a digital display, such as a sample lesson, attracts attention and increases interest in the lesson. Her emphasis on students' improved

understanding of the organization of ideas further indicates that she considers ICT a supportive resource that makes abstract concepts of writing more visible and accessible. This perception reflects the belief that technology facilitates learning by providing visual examples and models that help students improve their written work.

Likewise, Jamuna noted, "*Using templates helps students start their writing more easily, especially those who don't know how to begin."* She further added*, "I also show model paragraphs or essays, and students try to follow the same pattern in their own writing."* Jamuna shared ICT as a helpful tool that supports students during the initial stages of writing. By using templates and model texts, she helps students who experience difficulty in beginning writing tasks and organizing their ideas. Her use of examples suggests that students learn to write more effectively when they can observe and imitate appropriate text structures. This shows that ICT resources not only facilitate the organization of writing but also enhance students' confidence and independence in producing written texts. Moreover, I found that Jamuna's perception highlighted the role of ICT in supporting the entire writing process through exposure to authentic materials and guided practice.

Similarly, Deepak added, *"When students watch examples, they get clear ideas about structure, vocabulary, and sentence formation."* He continued, *"The sample which is shown in the class helps my students to do other similar writing tasks."* This response suggests that the participant perceives ICT- supported examples and model texts as valuable resources for developing students' writing skills. According to him, exposure to sample texts helps learners understand elements of writing, such as text structure, vocabulary use, and sentence formation. His observation that students can perform similar writing tasks after viewing examples suggests that ICT facilitates learning through modelling and imitation. Besides, this perception reflects the belief that visual patterns and writing conventions enhance students' own writing.

Another participant, Shiva, mentioned, *"I use videos or slides to explain how to write different types of texts, and students seem more interested and attentive."* He further added, *"Showing good and weak samples helps students compare and improve their own writing."* Shiva's narrative reveals his perception of ICT as a means of creating an interactive and reflective learning environment for writing instructions. Using slides, videos, and contrasting writing samples, he helps students visualize the

features of effective and ineffective texts. This comparative approach has encouraged students to critically examine the quality of writing. Besides, I found that his emphasis on students' increased interest and attentiveness suggests that multimedia resources may promote engagement in writing activities.

While considering teachers' perceptions of how ICT can increase motivation and engagement among students, I found that teachers believe ICT plays a significant role in enhancing students' engagement and motivation during writing instruction. All teachers have considered ICT as beneficial because it provides them with a chance to include multimedia materials, model texts, templates, videos, slides, and digital presentations into their classroom practices for teaching writing. That eventually helped them to make writing more accessible, engaging, and relevant for students.

Besides, from their narratives, I found that ICT has helped their students overcome difficulties related to idea generation, content organization, understanding text structure, vocabulary development, and sentence formation. Furthermore, the participants believed that exposing students to model texts and constructing writing examples enables them to learn through observation, imitation, comparison, and reflection. Such methods not only increase students' interest and engagement but also promote confidence, independence, and critical thinking in writing tasks. I also found this finding aligns with Hyland (2018), who illustrated that learners develop writing skills more effectively when they are exposed to model texts. This demonstrates how language, structure, and organization operate in an authentic context.

I also found that the data align with the assumptions of constructivist learning theory. This theory views learning as an active process in which learners construct knowledge by connecting new information rather than simply receiving it from the teacher (Vygotsky, 1978). In this research, too, I observed that the participants conceived ICT resources, such as model texts, templates, videos, and multimedia presentations, as beneficial because they provide opportunities for students to actively engage in writing tasks. The teachers reported that through activities such as observing examples, comparing different writing samples, and applying these models to their own compositions, they found that their students constructed their understanding of text organization, vocabulary, and sentence structure.

Furthermore, I found that the teachers described ICT as a supportive tool that enables learners to analyze, reflect, and improve their writing skills rather than merely

copying information. For instance, they shared that using strong and weak writing samples, their students could identify the characteristics of effective writing and could evaluate their own work accordingly. I found this reflects the constructivist principle, which emphasizes students' meaningful learning that occurs when learners actively construct knowledge through exploration, comparison, and reflection.

I also found that the teachers viewed ICT as a learning resource that supports students in developing writing skills through participation in various activities to learn the target languages' content, rather than as a learning tool. This finding is also consistent with the TPACK framework, which emphasizes the integration of technological, pedagogical, and content knowledge. Similarly, I found it also makes a connection to the studies by Yunus et al. (2013), which explained that ICT can increase students' motivation, engagement, and writing performance through interactive learning environments and guided practice. Thus, this way the teachers' narratives suggest that ICT functions not only as a technological aid but also as a pedagogical resource that supports writing development through visualization, modelling, scaffolding, and active learner engagement.

Writing Enhancement and Language Learning

It is undeniable that ICT has redefined the landscape of learning (Roopa & Khanna, 2024). Research studies suggest that ICT has the potential to transform traditional teaching methods, making learning more interactive and meaningful by enhancing student engagement and contributing to better learning outcomes (Karunakaran & Aruldhas, 2021). However, I found that some researchers acknowledged that successful integration of ICT depends on different contextual factors, including the availability of technical resources, infrastructure, and effective classroom management (Butler et al., 2015). It further showed that when these challenges are addressed well in the classroom, they can enhance our students' skills, confidence, and overall learning outcomes (Torres et al., 2023).

In this research, these findings provided a background for exploring how teachers perceive and experience ICT integration into their classroom practices. While interpreting the data, I found that supporting writing development and language learning emerged as another key benefit perceived by participants from using ICT to teach writing skills. The teachers also considered ICT to be a useful tool that supports students in the writing process. According to the narratives, ICT supports learners at

different stages of writing development rather than simply helping them produce a final writing product, thereby enhancing language learning. In this regard, Deepak viewed ICT as a useful tool for making writing more interactive and learner- centred. While narrating his perspectives, he explained:

> *For me, ICT integration means using available technology to make writing more interactive, meaningful, and student-centered. Even using a mobile phone to show pictures, videos, or writing samples can be a form of ICT integration. ICT helps students generate ideas, organize their thoughts, revise their writing, and receive immediate feedback.*

From his narratives, I found that he perceives ICT as supporting students throughout different stages of writing rather than simply helping them produce the final product. Further, I observed that he particularly valued the role of ICT in generating ideas, improving vocabulary, organizing thoughts, revising their writing, and receiving immediate feedback. Not only that, but from his narratives, I found that he emphasized ICT because it helps create opportunities for collaborative learning through platforms such as Messenger and Google Docs. According to him, these tools help students improve both in writing skills and language use. He explained that these tools helped his students to strengthen both their writing skills and the use of language in real contexts.

Jamuna also shared her similar perception. She shared that her experiences with ICT developed gradually after the COVID-19 pandemic. She said, *"I used to take my students to the audio-visual room occasionally before COVID-19 for showing them educational videos and for listening practice. For writing, I used downloaded templates from the internet."* She further said*, Nowadays, I have started using Google Docs. Students write simple paragraphs or essays there, and I give comments for correction. They can see their mistakes immediately and revise their work."* She reiterated that her students frequently use online resources to look up vocabulary and writing ideas before starting a writing task. According to her, these digital opportunities help students improve both their language use and the quality of their written work.

Similarly, another participant, Maya, also acknowledged the contribution of ICT to students' writing and language learning, but her perspective was comparatively more cautious. She explained, *"Students can search for vocabulary and look at*

different writing examples on the internet. They can understand different writing formats and gather ideas before they start writing. ICT is helpful in that sense.

She further stated, *"However, sometimes students become too dependent on online resources. Instead of thinking and writing in their own words, they simply copy information from the internet. Therefore, teachers need to guide them properly while using technology."*

From Jamuna's narratives, it is revealed that she considers ICT a valuable resource for developing vocabulary and understanding different genres of writing. However, she also found it concerning that students' resilience with digital tools for completing their writing tasks. Further, she highlighted that technology should be used to help students become better writers rather than making them replace their own reasoning and creativity.

Considering all of these narratives, it was shown that ICT is perceived by teachers as an important resource for developing writing and language learning. I found them associating ICT with helping students generate ideas, expand vocabulary, organize their writing, revise drafts, and receive feedback from the teacher. Meanwhile, they also emphasized that technology alone does not improve students' writing. Instead, the effectiveness of ICT depends on how teachers use it to guide learning and how responsibly the students engage with digital resources. Teachers' experiences suggest that ICT is most useful when it encourages students to think independently, express their own ideas, and actively participate in the writing process.

The above findings also align with the TPACK framework (Mishra & Koehler, 2006), which focuses on integrating technical, pedagogical, and content knowledge for effective teaching. The participants' experiences show that they used ICT not simply as a technological tool, but rather as a resource to support different stages of writing, including idea generation, vocabulary development, drafting, revision, and feedback. However, I found that the extent to which they integrate ICT into their teaching varies with their confidence, professional learning opportunities, and the resources available in their school. This suggests that meaningful ICT integration depends not only on access to technology but also on teachers' ability to integrate digital tools with appropriate teaching strategies to support students' writing development.

Similarly, I found that the above finding also aligns with the principles of constructivist learning theory, which views learning as an active process in which learners construct knowledge through interaction, exploration, and reflection rather than by passively receiving information. The participants also described how ICT encourages students to search for information, explore model texts, exchange ideas in pairs and groups, revise their writing, and receive feedback from their teachers. I found these experiences suggest that ICT can create opportunities for students to take a more active role in the writing process while supporting collaboration and shared learning. However, Deepak's concern that some students tend to copy directly from online resources shows that technology alone does not lead to meaningful learning. I identified from the teachers' experiences that teachers play a crucial role in guiding students to use digital resources critically and responsibly, enabling them to develop their own ideas and improve their writing skills.

According to constructivist perspectives, learning occurs when learners actively construct knowledge through interaction, exploration, and reflection rather than passively receiving information. The participants described ICT as enabling students to search for information, explore writing examples, discuss ideas with peers, revise their own work, and receive feedback from teachers. These practices encourage learners to become active participants in the writing process and support collaborative knowledge construction. However, the participant Deepak's concern about students copying directly from online sources also suggests that technology alone does not guarantee meaningful learning. In general, ICT could be more effective when it is supported by meaningful teachers' guidance and active students' participation (Roopa & Khanna, 2024)

Overall, the participants perceived ICT as an important pedagogical tool that supports writing development and language learning by helping them with idea generation, vocabulary development, revision, collaboration, and feedback. Their narratives indicate that the educational value of ICT depends not only on the availability of technology but also on teachers' pedagogical use of it to foster active and meaningful learning experiences, as Torres et al. (2023) found.

Accessibility of Authentic Learning Resources

ICT tools have been considered advantageous for accessing a wealth of learning materials. In this regard, Mahenge and Sanga (2016) have noted that

advances in ICT have brought new learning opportunities despite the challenges of its effective adaptation in education in developing countries. It ensures convenient use by serving consumers beyond time limitations, which can be a motivational factor in pedagogical activities (Alphonce & Mwantimwa, 2019). In addition, it has been found that the more students use ICT-based tools, the more they progress in their learning, leading to greater improvement (Halim et al., 2018). The scholars have argued that the internet helps students to access a variety of authentic learning materials that are more interactive for them.

In line with the aforementioned arguments, the research participants also shared their views. The participants claimed that ICT provides students access to authentic learning materials, writing models, and a wide range of educational resources that enhance writing instruction. The participants explained how digital technologies enable teachers to expose students to real-world texts, multimedia resources, and sample writings that would be difficult to get from printed textbooks only. They perceived these resources as useful for helping students understand different writing formats, generate ideas, and enrich their language learning.

A research participant, Deepak, considered ICT as a valuable source of learning materials that support students' writing development. While explaining his understanding of ICT integration, he stated, *"Even using a mobile phone to show pictures, videos, or writing samples can be a form of integration; in our context, ICT means using whatever resource to support students' learning."*

This response indicates that Deepak viewed digital resources, such as pictures, videos, and writing samples, as important learning materials that help writing instruction. Similarly, another participant, Maya, viewed digital resources such as pictures, videos, and writing samples as important learning materials for enriching students' writing skills. She explained, *"When we search online, we can find templates and many other resources."* She further added, *"Students can search for vocabulary and look at different writing examples on the internet.* However, she also expressed that students should use ICT tools carefully. She noted, *"I found that students become too dependent on online resources. Instead of thinking and writing in their own words, I saw them simply copying information from the internet."* This perception of Maya indicated that although ICT gives ample resources for the

students, effective teachers' support and guidance are necessary to ensure the effective and meaningful use of ICT by the students.

Likewise, Shiva conceived ICT as a source for authentic materials. Defining ICT in relation to writing, he stated: *"In my opinion, ICT for writing refers to tools that help students develop ideas, view sample texts, draft, edit, and receive feedback."* He further explained that ICT enables students to: *"Generate ideas, see examples, organize their thoughts, edit their work, and receive feedback."* These responses indicate that Shiva viewed sample texts and examples as useful learning resources that support students' understanding of writing.

Likewise, another participant, Jamuna, perceived ICT as providing students with access to authentic and diverse learning resources. She explained: *"ICT plays a significant role in developing writing skills. It provides me with access to authentic materials, ample texts, multimedia resources, and online references that can stimulate students' ideas."* From these narratives, I found that her perception highlights the importance of authentic digital resources in supporting students' writing and language learning.

Overall, the teachers perceived ICT as an important medium for authentic learning materials. The narratives above show that the teachers use digital resources such as writing templates, sample texts, online references, images, videos, and multimedia materials. These digital tools helped them help their students understand different genres, expand their vocabulary, and generate ideas for writing. At the same time, I found two teachers, Shiva and Jamuna, who emphasized the appropriate guidance for teachers on the use of digital materials.

The findings are also consistent with constructivist learning theory, which sees learning as an active process in which students generate knowledge through interaction with relevant resources and experiences (Vygotsky, 1978). In this study, I found that teachers' perceived understanding of ICT was that it provides students with opportunities to explore authentic texts, writing samples, videos, images, and online resources before beginning writing tasks, as Halim et al. (2018) argued. This also reflects the TACK framework, which emphasizes the purposeful use of technology to support teaching and learning. Thus, rather than simply delivering information, ICT functions as an instrumental tool that creates opportunities for students to explore, think, and develop their own understanding throughout the writing process.

Teachers' Beliefs Regarding ICT Integration

Teachers' attitudes and beliefs play an important role in how they integrate ICT into teaching and learning. They influence teachers' willingness to use technology, their confidence in using digital devices, and the way they incorporate ICT into their classroom practices (Charisma et al., 2025). Studies have shown that teachers with positive beliefs about the use of ICT are more likely to use it to support students' learning. On the contrary, teachers who lack confidence about the use of technology can hinder effective ICT integration into their teaching (Mishra & Koehler, 2006). Therefore, in this research, I considered understanding teachers' attitudes and beliefs essential to explaining how ICT is integrated into their writing instruction.

In the context of English language teaching, teachers' beliefs influence not only the selection of technological tools but also the pedagogical purposes for which they are used. These perceptions shape how teachers use ICT in writing lessons. Depending on their beliefs, ICT may be used simply to present learning materials or to support students throughout the writing process (Liu & Yusof, 2026). This understanding also aligns with the Technological Pedagogical Content Knowledge (TPACK) framework by Mishra and Koehler (2006), which highlights that successful integration of technology means combining technological, pedagogical, and content knowledge.

Besides, guided by the interpretivist paradigm, this study views teachers' attitudes and beliefs as being shaped by their professional experience, classroom context, and everyday teaching practices as described by Ertmer et al. (2016). Further, it is also guided by qualitative research inquiry, which considers teachers' experiences as valuable sources for understanding how they construct meaning from lived experiences (Braun & Clarke, 2006). In this study, too, the participants explained how they understood ICT, the value they attached to technology in teaching writing, and how these beliefs influenced their classroom practices.

While capturing their viewpoints on their attitudes and beliefs towards ICT in teaching writing, it was found that Deepak considered ICT as "a *practical and valuable teaching tool that makes writing instruction more interactive, meaningful, and student- centered, even in resource -constrained classrooms."* Similarly, for Maya, *"It is an essential part of effective teaching because it enhances students'*

engagement and learning". Further, for Shiva, *"It is an essential part of effective contemporary writing instruction that motivates students to improve learning, although its success depends on teachers' guidance and students' creativity."* Later, Jamuna explained, *"It is important to make learning more interactive and engaging, complementing teachers' pedagogical practices rather than replacing them."*

Overall, these narratives show that the participants held positive attitudes and constructive beliefs towards ICT integration in writing instruction, as TPACK suggests. The participants willingly welcomed the use of ICT in their classrooms, as Charisma et al. (2025) found in their work; however, they rarely had opportunities to embrace it in their actual ELT activities for various reasons. They realized that students can interact more in the classroom when provided with opportunities to use ICT tools, thereby improving their learning progress interactively (Bruner, 1966; Vygotsky, 1978). Considering this, the subordinating theme below presents the participants' overall attitudes and beliefs towards ICT integration into writing instruction. It provides a broad understanding of how teachers perceived the role of ICT in teaching writing and how these perceptions shaped their instructional practices.

ICT-Enhanced Writing Instruction

ICT users have developed awareness of ICT use worldwide. In this regard, scholars such as Al-Zaidiyeen et al. (2010) have suggested that the use of ICT for educational purposes should receive greater consideration than it has. While these kinds of scenarios have been seen in the field of education, it is obvious that teachers can have various views and experiences. In some contexts, it has been found that teachers have very positive attitudes towards the use of ICT in classrooms but experience a scarcity of ICT tools, so they can barely conduct ICT-friendly pedagogical activities (Sánchez et al., 2012). In some cases, teachers' self-efficacy in using technological tools contributed to their ICT-facilitated classrooms, and they were very positive about using them (Player-Koro, 2012). In Nepal, teachers also have their own perspectives on ICT use in ELT classrooms. In this regard, the participants have shared their views in this research, presented below.

The teachers' narratives revealed that they generally hold a mix of positive and cautious attitudes towards ICT-integrated writing. Although the participants differed in their levels of ICT knowledge, confidence, and access to technologies, most

participants expressed interest, openness, and motivation to use ICT in their classrooms. They perceived ICT as a useful tool for enhancing students' engagement in writing and improving the presentation of writing work. One of the participants, Maya, stated, "*Students are more interested when the teacher uses a projector or smart board for teaching writing,"* reflecting a positive attitude towards ICT as a motivational tool.

Similarly, another teacher, Deepak, shared, "*ICT helps students to correct their mistakes easily,"* indicating a belief in its usefulness for improving accuracy and efficiency in writing tasks. He further believed that ICT motivates students and makes learning more effective by helping them understand concepts more easily. He said, *"ICT increased students' motivation. Visual materials help them understand concepts more easily. It also helps improve vocabulary and makes the revision and feedback process more effective."* These narratives from teachers show that they construct a positive meaning of ICT based on their classroom experiences, even when its use is limited.

However, some teachers also expressed uncertainty and a lack of confidence in their ability to use ICT effectively. One teacher, Jamuna, narrated, "*Sometimes I try to use technology, but I feel I may not handle it properly in front of students. It happened in one of my classes. I took a laptop and a projector into the classroom to teach them the writing lesson."* She further added*, "At that time, I couldn't connect the projector well, and all the students stared at me. I felt nervous and also felt I might lose my time."* Likewise, another teacher, Deepak, mentioned, "*Traditional methods are easier to manage in the classroom. In the short time, I mean the limited time of the class, sometimes it kills the time. It takes the whole period to manage them."* These accounts indicate hesitation and limited self- efficacy in integrating ICT into writing instruction.

Despite this hesitation, I found a noticeable change in his attitude toward ICT over time. I observed that initially, he considered technology unnecessary and was hesitant about effective teaching because traditional methods had been sufficient. However, his experiences during and after the COVID-19 pandemic changed his perceptions of the use of ICT in his classroom practices. In this regard, he explained, *"I used to believe that better teaching was possible without ICT. However, after*

COVID-19, I realized the importance of technology. Now, I see ICT not just as an additional tool but as an essential part of teaching."

Similarly, Maya shared her views on classroom management and ICT. She shared, "*When I use ICT, students get distracted easily, and it becomes difficult to control the class."* When I asked another teacher, Shiva, about his perspectives on the same concern, he stated, *"It takes more time to teach students using ICT. With the workload in school, I find it difficult to use it regularly because I cannot manage the time in the class".* From Shiva's narrative, I identify that time constraints, classroom discipline, and workload pressure also contribute to teachers' reluctance to use ICT in teaching writing skills.

While considering all the teachers' perspectives, I found that they have a positive attitude towards integrating ICT into writing instruction. All of them perceived ICT as a valuable educational resource that enriches writing instruction, motivates students, and provides opportunities for language learning. However, I also found that they believe technology should encourage students to become independent and creative writers rather than passive users of digital resources. These findings also align with Mishra and Koehler's TPACK framework, which suggests that better technology integration is possible when teachers use technological, pedagogical, and content knowledge in their classroom teaching.

The participants' positive attitudes towards ICT (Player-Koro, 2012) suggest that they recognize its pedagogical value in teaching writing. However, I noticed that they also acknowledged that technology alone cannot improve learning. Its effectiveness depends on how teachers use it to support students throughout the writing process. The participants also emphasized the importance of teachers' guidance and facilitation, students' creativity, and the purposeful integration of ICT into pedagogical practices. I found these findings are also consistent with Constructivist Learning Theory (Vygotsky, 1978), which views teachers as facilitators who support students in actively constructing knowledge through meaningful learning experiences.

Learner Autonomy and Classroom Management

Due to the rapid advancement and influence of technology across sectors, people's digital competence has increased significantly in recent years. It is enhancing people's creativity and autonomy, leading them to perform better and feel more

empowered (Huu, 2023). In such a context, scholars have suggested organizational conditions or leadership approaches to realize the foundational importance of ICT use for better outcomes and to foster technological competence among teachers (Kim, 2026). Thus, it has been found that the proper integration of ICT into any job or task can foster creativity and autonomy among users (Cheng et al., 2026). Indeed, such discussions of scholars' findings show how helpful ICT integration can be when implemented in practice across sectors, including education.

So, this study also examines participants' views on the use of ICT and its impact on the development of writing skills in ELT classrooms. Although the participants generally expressed positive perceptions of ICT integration in teaching writing skills, they also raised concerns about students' dependence on digital technologies and the challenges of managing ICT-supported classrooms. The participants highlighted many educational benefits of ICT. However, they believed that depending too much on digital materials may discourage students from developing independent thinking, creativity, and authentic writing skills. They also perceived that effective classroom management and teachers' guidance are important for ensuring the meaningful use of technology.

In this regard, Jamuna said, *"Students can search for vocabulary and look at different writing examples on the internet. They can understand different writing formats and gather ideas before they start writing."* She further said, *"However, sometimes students become too dependent on online resources. Instead of thinking and writing in their own words, they simply copy information from the internet."* She expressed the strongest concern regarding students' dependence on online resources. Although she admired that ICT provides students with access to a variety of learning materials, she believed that technology could negatively affect students' originality if it was not used appropriately. She emphasized that teachers play an important role in guiding students' use of technology so that ICT supports learning rather than merely reproducing online information.

Maya also shared a similar concern. Although she believed that ICT provides valuable learning opportunities, she also found that her students often relied on digital resources without critically evaluating their credibility. As she said, *"Most students use their mobile phones to search for information. Sometimes, they look for examples and search for vocabulary online. I found many students copy and paste the*

information from the internet sources." This narrative suggests that although ICT provides easy access to information, I identified that many teachers remain concerned about preserving students' originality and encouraging them to express their own ideas through writing tasks.

Similarly, I observed that Shiva emphasized the use of technology to enhance, rather than replace, students' thinking and creativity. For instance, he noted, *"As a teacher, we need to know that technology always supports creativity in teaching. It does not replace teaching and learning itself."* This way, he reflected his belief, emphasizing that technology should enhance writing rather than replace students' thinking and creativity. For this, he highlighted the teachers' role in fostering independent and critical writing skills.

Likewise, Deepak viewed ICT positively but stressed the importance of teacher facilitation in technology-supported learning. He believed that digital tools should make writing more meaningful and learner-centered while supporting, rather than replacing, students' learning. This suggests that the successful integration of ICT depends not only on technological resources but also on the teachers' ability to manage students' learning effectively.

Considering all participants' perspectives, it was found that technology alone cannot improve students' writing. Instead, they believed that without appropriate teacher supervision, students might become overly dependent on online resources and develop a habit of copying information. They may excessively rely on digital tools rather than generating their own ideas. Therefore, they viewed that for successful ICT integration in writing instruction, teachers' guidance and effective classroom management are essential.

The findings above can be understood through Constructivist Learning Theory (Vygotsky, 1978), which suggests that students learn best by actively constructing knowledge through meaningful learning experiences. The teachers' concerns about students copying information from the internet show that access to technology alone is not enough. Instead, the teacher's role is important in guiding students to think critically, develop their own ideas, and use digital information meaningfully, thereby fostering learner autonomy (Huu, 2023).

In the same way, these findings support the TPACK framework, which emphasizes that technology is most effective when teachers integrate it with

appropriate pedagogy and content knowledge (Mishra & Koehler, 2006). Thus, the participants' narratives indicate that meaningful technology integration depends not only on access to digital resources (Halim et al., 2018) but also on teachers' pedagogical ability to monitor students' learning, promote originality, and create a classroom environment in which technology supports learning rather than dominating learners in the writing process.

ICT Rather Supports Than Transforms

It is commonly believed that the use of ICT helps individuals be more productive by enabling them to carry out their jobs more efficiently. It is also recognized that its use ensures productivity across sectors, and education is no exception. In this regard, Anderson (2010) argued that the use of ICT in instruction changes the roles of both teachers and students. He also mentioned that teachers shift their role of transmitting knowledge in a controlled manner to that of facilitator, collaborator, coach, or co-learner. In the same way, the students also change from passive recipients of information to knowledge producers. In line with these statements, Kozma and Issacs (2011) also argued that integrating ICT into the education system makes a difference in teaching and learning.

Thus, the use of ICT both supports and transforms the teaching and learning activities in the ELT classrooms. So, in the 21st century, it is necessary for educators to lead in a technologically changing environment (Keane et al., 2016). Observing such discussions of the scholars, it can be said that the use of ICT in education is the best way to ensure better educational outcomes. In this regard, the participants in this research also shared their views as follows.

All four participants considered the educational value of technology but consistently perceived ICT as a resource that supports teachers' instructional practices, rather than as a replacement for traditional teachers' roles. Their perspectives reveal that meaningful writing instruction still largely depends on teachers' pedagogical guidance, with ICT being an additional means of enriching the learning process. Another important perception emerging from the participants' narratives regarding ICT integration into writing skills was their belief that ICT should serve as a supportive, rather than transformative, tool in writing instruction. Deepak viewed ICT as a helpful tool that enhances classroom teaching without changing the teacher's role. He said, *"For me, ICT integration means using available*

technology to make writing more interactive, meaningful, and student-centered. Adding his perspectives on this, he said, *"It is not only about using sophisticated devices. Even using a mobile phone to show pictures, videos, or writing samples can be a form of ICT integration."* He further added, *"In our context, ICT means using whatever resources are available to support students' learning."* According to his statements above, Deepak perceived ICT primarily as a supporting resource that helps teachers deliver writing instruction more effectively, rather than as a replacement for conventional teaching methods.

Jamuna also expressed a similar thought. She said, *"Students can search for vocabulary and look at different writing examples on the internet. They can use these formats to gather ideas to begin their writing."* Further, she said, *"But sometimes students depend more on them. Instead of thinking and writing in their own words, they simply copy information from the internet."* Through this statement, although she acknowledged that ICT provides access to valuable learning resources, she believed that students still need continuous teacher guidance. She perceived teachers' role as essential in helping students use digital resources thoughtfully and responsibly.

Shiva also viewed ICT as an instructional support rather than a complete transformation of teaching. He seemed to have changed his perception after the COVID- 19 pandemic. He said, *"I thought better teaching is possible with technology. But when we had to teach using it during the COVID-19 pandemic."* Further, he shared his changed perspective by saying, *"I realized its importance. Now it is helping me to make my class engaging. I think it is an important part of our classroom practices."* He stated, *"Earlier, I believed that effective teaching was possible without ICT. However, after COVID-19, I realized the importance of technology. Now, I see ICT not just as an additional tool but as an essential part of teaching."* In a similar line. Maya also highlighted the contemporary role of ICT in writing instructions. She said, *"Teachers need to ensure that technology supports creativity rather than replacing it."* Her response reflects the belief that ICT should facilitate learning while teachers continue to guide students' thinking, writing, and reflection.

Taken together, the participants perceived ICT as an important educational resource that supports writing instruction as it made a difference in their instruction (Kozma & Issacs, 2011). It provides additional opportunities for learning, feedback,

and access to information. However, they did not believe that technology alone could transform teaching or improve students' writing and autonomy (Huu, 2023). Instead, all of them emphasized that effective learning is based on teachers' pedagogical practices, classroom guidance, and students' active engagement. Besides,

I found these findings closely align with the principles of Constructivist learning theory (Vygotsky, 1978), which positions teachers as facilitators who scaffold students' learning experience. The teachers highlighted teacher guidance, student creativity, and the purposeful use of technology. These findings demonstrate their belief that ICT supports the writing process, as Anderson (2010) argued.

Teachers' Evolving Professional Readiness for ICT Integration

The teachers' perceptions of ICT integration and their professional readiness influence how technology is used in teaching and learning. According to the TPACK framework (Mishra & Koehler, 2006), effective ICT integration involves more than simply knowing how to use digital tools. I understood that teachers need to know how to meaningfully integrate technology with appropriate teaching strategies and subject knowledge to enhance students' learning. From an interpretivist perspective, I found that these perceptions are not viewed as static. Instead, they change over time through teachers' classroom experiences, professional learning, interactions with colleagues and students, and the opportunities and challenges they encounter within the educational contexts (Clandinin & Connelly, 2000).

While the use of ICT tools is rampant across sectors, the education sector is no exception. Given its urgency, I explored the teachers' willingness to integrate the tools into their pedagogical practices. Thus, I uncovered their evolving professional readiness for ICT use in teaching writing in their ELT classrooms in this research.

The study showed that teachers' perceptions of ICT integration into writing skills varied over time, shaped by their professional journey, classroom practices, and exposure to digital technologies. Besides, the narratives revealed that participants' views of ICT changed as they became more familiar with technological tools and recognized their possible use for writing instruction. Most participants initially regarded ICT as an additional teaching aid; their experiences changed, particularly with the increased use of technology in schools and during the COVID-19 pandemic. Besides, this professional readiness came not just from formal training but also from

self-learning, trying things out, working with colleagues, and regular classroom practice.

For example, Shiva reflected on the gradual transformation of his practice, explaining that when he first *"joined his school, ICT facilities were almost non-existent"*, which forced him to rely on *"traditional teaching methods"*. As digital resources gradually became available, he began using his *"personal smartphone and laptop to search for teaching materials, download writing activities, and present multimedia resources to students"*.

Similarly, Jamuna described how she initially used ICT mainly *"to display videos and presentations but later began integrating templates, model texts, and online resources to support students throughout the writing process"*. Deepak also explained that he *"increasingly relied on Google resources and authentic writing examples because they helped students understand text organization, vocabulary, and sentence structure more effectively"*. Further, Maya also viewed *"ICT as an important means of making lessons more engaging and meaningful through the use of computers, internet resources, and multimedia materials"*.

These narratives illustrate that the teachers' professional readiness grew through their classroom experience rather than appearing completely from the beginning. The teachers' narratives in this research also reflect earlier research showing that beliefs and confidence in using technology develop gradually through classroom practice and first-hand experience (Ertmer et al., 2012). Studies I have reviewed revealed that, rather than relying solely on technological skills, meaningful ICT integration grows as teachers combine their professional knowledge with a supportive school environment and continuous reflection on their teaching practice (Tondeur et al., 2017). Similarly, I encountered another study by Akram et al. (2022), which found that teachers become more positive about using ICT when they recognize its usefulness in improving students' engagement and learning. More recently, Almerich et al. (2024) also emphasized that teachers' readiness to integrate ICT is shaped by both individual factors, such as confidence and competence, and contextual factors, including institutional support and access to resources.

These findings, from an interpretivist lens, suggest that professional readiness is not simply a matter of having technological skills. Instead, it is a continuous process of professional development in which teachers continually reconstruct their

beliefs, knowledge, and instructional practice in response to their classroom experiences and educational needs. Global education has grown phenomenally, with practitioners experiencing unprecedented opportunities in the field (Majumdar, 2015). The scholars have found that its use facilitated interaction among students beyond geographical boundaries, helping them achieve their learning objectives. Thus, ICT has been counted as a means of reshaping the traditional teaching and learning paradigm as it has been rapidly evolving in the educational landscape (Ashish & Anitha, 2024). So, as a tool for learning to learn, it suggests changes to traditional educational settings and helps teachers and students stay motivated (Forcheri & Molfino, 2000). With such characteristics, it offers teachers a variety of experiences that surely shape their perceptions. In this regard, the participants in this research narrated their views.

The narratives of all participants demonstrated that their perceptions of ICT were shaped and reshaped throughout their professional journeys. This was possible as they encountered new technologies, reflected on their classroom practices, adapted to changing educational contexts, drew on practical experience, and benefited from institutional support, among other factors. Although their experiences differed, they shared a common belief that effective ICT integration requires continuous learning, practical and institutional support. I found that most of the teachers in this study reported initially relying on traditional teaching methods and viewing technology as a supplementary resource rather than an essential component of writing instruction. However, as they gained greater exposure to ICT tools and experienced their benefits in their classroom practices.

They began to recognize technology as an important means of enhancing students' engagement and supporting writing development. In this regard, Deepak clearly described a change in his perception from viewing ICT as impractical to recognizing its value. Reflecting on his changed perception, he explained, *"Before, I used to think that ICT could be used only in well-equipped classes. In the school where I teach, I think it wouldn't be possible because we didn't have equipment and infrastructure."* He further added, *"But after COVID -19, I realized that even by using mobile phones I could teach students to read and write".* From Deepak's narrative, I encountered a significant transformation in his perception of ICT. At the beginning, he associated ICT with expensive infrastructure and believed it was not

suitable for the classroom, especially in public schools in Nepal. He added that ICT integration was possible in well- resourced schools. However, his professional experience during and after the COVID-19 pandemic reshaped his beliefs about it. I observed that he realized he had changed over time and came to recognize that meaningful ICT integration could be achieved with simple, readily available technologies rather than relying on sophisticated digital resources. This change in perspectives suggests a shift from viewing technology integration as resource-dependent to considering it as a more practical, flexible, and context-sensitive teaching practice.

Likewise, Jamuna also shared her changed perspectives during the interview. She said, *"I hardly used ICT because my school lacked the facilities for it. After the COVID-19 pandemic, technology use increased, and now it feels difficult to teach without it."* Her narrative reveals that her view of ICT changed as the educational environment changed. At the beginning, her exposure to ICT was limited due to a lack of technological facilities. Nevertheless, the increased use of technology after the COVID-19 pandemic changed her perception of ICT. She gradually began to see it as an integral part of classroom instruction rather than an additional teaching tool.

I found Shiva's perception is even stronger. In this regard, he explained, *"I used to think that teaching using material like textbooks, whiteboards, and makers is sufficient to deliver lessons to my students."* Highlighting his changed perspectives, she said, *"But, after COVID-19, I realized that for better classroom teaching, ICT is important. The students are also different, and they don't feel happy without digital tools. So, I feel it is very important to use ICT in my classes now.* From these narratives, I noticed a meaningful transformation in his professional thinking. Initially, he believed that traditional teaching methods were enough to support students' learning. However, he expressed that as he gained more classroom experience and responded to changing educational needs, he began to view ICT as an important component of effective teaching. I found that Shiva's narrative shows how practical experience and the evolving demands of education influenced how he understood and integrated ICT into his pedagogical practices.

Similarly, Maya expressed a changed perspective on ICT integration after her classroom experiences. She said, *"I always took ICT as an optional tool. I felt comfortable using my usual tools in the classroom."* She further added, *"But after*

using PowerPoint slides, Google Classroom, Zoom, and so on, during the COVID-19 pandemic and a few tools after the pandemic, like projectors, digital boards, I realized its importance." From the narratives I encountered, Maya's understanding of ICT developed gradually after the COVID-19 pandemic. She realized that ICT could enhance teaching by making learning more interactive, engaging, and student-centered.

Overall, the narratives of four English language teachers reveal that their perceptions of ICT evolved over time. This happened due to two main reasons. One is due to their classroom experiences, and the other is due to changes in the broader educational context. In the beginning, most of them regarded ICT as an additional teaching method and even found it difficult to integrate into their pedagogical practices due to limited resources, inadequate training, and a lack of experience. However, during and after the COVID-19 pandemic, their experiences with digital technologies helped them recognize the value of ICT in teaching writing. They gradually came to see ICT as an important (Forcheri & Molfino, 2000) and in some cases, an essential part of teaching writing instruction. Thus, these findings suggest that teachers' perceptions of ICT develop through their professional experiences rather than remain fixed over time. The more they use them in their classroom practices, the more they gain confidence. This also happened due to changing demands of ICT in classroom practices; they came to find it an essential component of effective teaching practices and also a supportive tool for developing writing instruction.

I found these findings align with the principles of Constructivist learning theory (Vygotsky, 1978), which holds that knowledge is constructed through experience and social interaction. As the teachers encountered new teaching challenges, particularly during the COVID-19 pandemic, and reflected on their classroom practices, they gradually developed a deeper understanding of ICT and its pedagogical value. This shows that teachers, together with their students, continuously construct and reconstruct their knowledge through authentic professional practice.

Moreover, it is consistent with the Technological Pedagogical Content Knowledge (TPACK) framework proposed by Mishra and Koehler (2006), which holds that teachers combine technological knowledge with pedagogical and content

knowledge through practice and experience. I encountered that as the teachers gained more experience with the digital tools; they became more confident in integrating ICT into writing instruction. These changing perceptions of the teachers suggest that simply providing technology is not sufficient. Meaningful ICT integration also requires teachers to develop the knowledge, skills, and confidence to use ICT effectively in teaching writing.

Developing Confidence in Using ICT for Writing Instruction

As ICT integration in education is thriving worldwide across the academic spectrum, it has shaped practitioners' perceptions. Despite the challenges of integrating, it into education, it offers opportunities to learn and apply the skills required in the 21st century (Ghavifekr et al., 2016). Thus, ICT must be used in pedagogical activities. In such a context, teachers have increasingly been conceptualizing the use of ICT in their pedagogical activities. Afterward, they perceive this phenomenon differently, as they are influenced by local settings and global educational trends (Abel et al., 2022). In this research, the participants shared their thoughts and perceptions regarding ICT in education, highlighting the development of their confidence after ICT use in education.

Although all the participants expressed a positive attitude towards technology, they generally perceived themselves as moderately confident in integrating ICT into writing instruction. The confidence they showed was mostly due to the use of simple digital tools such as projectors, PowerPoint presentations, YouTube videos, and Microsoft Word. However, they also realized that limited formal training, insufficient technical support, and inadequate experience with digital tools limited their confidence in using ICT more effectively. Thus, the participants' perceptions suggest that confidence in ICT integration develops gradually through their classroom experiences and professional development rather than the availability of technology.

Among the four participants, Deepak stated, *"I feel moderately confident. I have been using digital tools such as PPT slides, projectors, smartboards, and Google Docs. But sometimes, I hesitate to use some of their features. I think this happens because of the internet issues and power cuts."* From his narratives, I found that he perceived himself to be moderately confident in integrating ICT into writing instruction. While he was comfortable using basic digital tools, he lacked confidence in some features of the tools he had used in his classroom practice. He expressed that

this occurred due to the limited formal training and the technical challenges he time and again experiences, both of which affected his confidence in ICT integration into writing instruction.

Similarly, Jamuna also explained her perceptions in this regard. She said, "*I feel comfortable in using digital tools like projectors, videos, and presentations. But I am not familiar with other advanced technology, especially focusing on writing."* She further added, *"Lack of training and technical support. Sometimes the internet does not work, and sometimes there are power cuts."* I encountered from her narratives that she has limited confidence in using ICT. Although she was comfortable using basic ICT tools, she felt that limited training and unreliable infrastructure prevented her from confidently integrating more advanced technologies into writing instruction.

Likewise, Shiva expressed his perspective in this regard along similar lines. He said, *"I feel confident now in using some digital tools like projectors, PowerPoint, YouTube, and also Google Docs. However, I still need to learn more about advanced applications."* He perceived himself as confident in using commonly available ICT tools but acknowledged that he still needs further learning to integrate more advanced technologies into his writing lessons. In this regard, Maya said, "*I feel moderately confident. I can use projectors and digital boards comfortably and prepare presentations. However, I still need more training on advanced applications and digital writing tools.* She further added, *"Training opportunities and technical support are important. When there are technical issues, such as internet problems or power cuts, I feel less confident."* From these narratives, I found that Maya perceived herself as moderately confident in integrating ICT into writing instruction. She could comfortably use basic digital tools, such as projectors and digital boards, for pedagogical purposes. However, she believed that her confidence depends on opportunities for professional training as well as reliable technical support during technical glitches.

Taken together, none of the participants described themselves as highly confident and motivated. Instead, they continued to share their confidence as moderate and developing. They felt they could use basic ICT tools such as projectors, videos, PowerPoint, Google Docs, and digital boards, but were not confident using more advanced digital applications. I found that most of the teachers in this study linked greater confidence to continuous professional development, hands-on training,

and reliable technical support (Abel et al., 2022). Their stories also suggest that confidence in the integration of ICT develops gradually through classroom practices, self-directed learning (Hakkarainen et al., 2001), and institutional support rather than alone through technology.

The findings can be interpreted through Mishra and Koehler's (2006) Technological Pedagogical Content Knowledge (TPACK) framework, which argues that effective technology integration requires teachers' technological, pedagogical, and content knowledge. Although the participants expressed confidence in using basic ICT tools, their narratives revealed a lack of clarity in how these technologies can be integrated into meaningful writing instruction. This shows that their technological knowledge was increasing while their technological pedagogical knowledge remained limited. As a result, their confidence was largely tied to operating the technology rather than using it strategically to facilitate writing at different stages, such as planning, drafting, revising, collaborative writing, and providing effective feedback.

Teachers' Professional Aspiration for Effective ICT Integration

Due to the rapid development of technology, every sector is technology-supported these days. In such a context, the education sector has embraced it since its inception, though the extent of its use varies from place to place. Therefore, users in the field of education have experienced various benefits despite challenges such as time constraints, administrative support, and infrastructural difficulties (Salehi & Salehi, 2012). Understanding its essence in today's time, teachers seem highly motivated to use it despite fighting various challenges, such as teacher training and support (Silviyanti & Yusuf, 2015). In such a scenario, the participants in this research also showed their aspiration regarding the effective integration of ICT.

The participants' narratives revealed that, although they recognized the educational value of ICT, they believed additional support was needed to integrate technology effectively into writing instruction. In this study, I found the teachers' aspirations centered on professional growth, practical ICT training, enhanced technology infrastructure, and institutional support. They shared a common desire to strengthen their ICT skills so that technology could be integrated more effectively and meaningfully into the writing instruction.

Reflection on these needs, Deepak said:

> *I need practical training and that needs to focus on teaching language skills. Our school is not providing us with reliable internet, so it should provide better internet connectivity and enough devices. We most of the time struggle to use them properly, so the school should give us technical support also.*

Deepak's narratives highlight his commitment to ongoing professional growth. I found him viewing ICT not as an on-time event; rather, he emphasized the need for continuous practical professional development that helps teachers use technology in their real classroom situations. This particular perception reveals that simply providing digital tools to the teachers is not enough. They also need practical guidance, reliable infrastructure, and sustained technical support to integrate ICT confidently and effectively into their teaching practices, including instruction.

Similarly, Jamuna also explained her perspectives in this regard, saying*, "I need focused and practical training that helps us to teach real content. Schools also need better internet connections, projectors, computers, and technical support."* Her narrative suggests that she aspires to improve her ICT competence through practical and professional learning while maintaining a balanced approach to technology use. She emphasized that technological advancement should improve, not replace, students' creativity and independent thinking.

On a similar note, Shiva shared how he aspired to effective ICT integration. He said:

> *I feel that we need practical training. Teachers should receive hands-on training in integrating ICT into writing instruction. Our school doesn't have good internet. So, for teaching our students better, we also need a good internet connection, more devices, and timely technical support.*

Shiva further added, *"In our school, we share and discuss how to use new technologies in teaching. I also participate in available trainings."* From his narratives, I found his commitment to continuous professional development. He viewed professional learning as an ongoing process. His interest in participating in training and collaborating with his colleagues suggests that he believes in continuous learning and the sharing of experiences, which would strengthen his ability to integrate ICT more effectively and meaningfully into his pedagogical practices.

In this regard, Maya also expressed a strong desire to enhance her ICT competency through professional development opportunities. She said, *"I want to*

participate in practical and focused training that specifically helps me use ICT in teaching language skills. *Regular technical support and better infrastructure would also be helpful."* She further added, *"I believe technology continues to play an important role in writing instruction. I think if I can use better tools to teach writing, my students' writing will improve."* From Maya's narratives, it is evident that she aspired to improve her ICT integration through practical, hands-on training. She also envisioned a future in which technology supports writing instruction and also prevents students' creativity, critical thinking, and independent writing abilities.

Taken together, the participants' narratives showed that all four participants shared an aspiration for more effective ICT integration in writing instruction, as Silviyanti and Yusuf (2015) found in their work. Although they recognized the value of technology, they consistently underlined the importance of professional growth, practical, hands-on training, reliable technological infrastructure, and institutional support. Their narratives further revealed that they believed ICT should be used to improve students' creativity (Hakkarainen et al., 2001), critical thinking, and independent writing rather than being dependent on. They also felt that regular professional development is important for helping teachers integrate ICT effectively into writing instruction amid numerous challenges (Salehi & Salehi, 2012). These findings can be connected to TPACK (Mishra & Koehler, 2006). The participants' desire for practical training reflects their aspiration to strengthen the integration of technological, pedagogical, and content knowledge, enabling them to use ICT more effectively in writing instruction.

Chapter Summary

This chapter discussed the study's findings based on the narratives of four secondary-level English teachers regarding their perceptions of ICT integration in teaching writing skills. The emerging themes presented here are drawn from interviews with research participants about their views on integrating ICT into writing skills. Guided by qualitative research approach, the chapter explored how the participants understood ICT, perceived its role in developing writing skills, and integrated digital technologies into different stages of the writing process. From the teachers' narratives on their perceptions of ICT integration into writing instruction, it was revealed that all teachers viewed ICT as a valuable instructional resource. The ICT tools that enhance students' writing development, engagement, collaboration, and

motivation include multimedia resources, authentic materials, digital writing platforms, and feedback tools.

The teachers' narratives also showed that their perceptions of ICT and their professional readiness developed gradually through classroom experiences, reflective practices, and professional learning, indicating that effective ICT integration is a continuous and context- dependent process. Overall, this chapter provides insights into how secondary-level English teachers perceived ICT and how their lived experiences shaped its integration into writing instruction. The findings show that the teachers' beliefs, professional readiness, classroom experiences, and the contexts in which they worked shaped the ways they used ICT to support students' writing.

CHAPTER V
EXPERIENCES OF ICT INTEGRATION INTO TEACHING WRITING

This chapter presents the analysis of data I collected from my research participants through semi-structured interviews. I conducted interviews with them to explore the experiences and challenges of English Language Teachers in integrating ICT into writing instruction. I developed emerging themes after reading and rereading the interview transcripts, as well as validating them with insights from classroom observations.

The previous chapter presented four initial superordinate themes and their subordinate themes in response to the first research question of this study: How do secondary-level English Language Teachers narrate their perceptions of ICT integration in teaching writing skills? This chapter presents the remaining four superordinate and subordinate themes in response to the second research question: How do secondary-level English Language teachers narrate their experiences of integrating ICT into teaching writing skills? The four superordinate themes are teachers' lived experiences with ICT integration in writing instruction; teachers' ICT practices in writing development; classroom context and infrastructure for ICT integration; and, lastly, challenges and future directions for ICT integration in writing instruction. The first theme, *Teachers' Lived Experiences with ICT Integration in Writing Instruction,* includes two subordinate themes: beginning teaching in resource-constrained and low -technology contexts, and COVID-19 as a turning point and growing confidence in ICT integration. The second theme*, Teachers' ICT Practices in Writing Development*, includes three subordinate themes concerning per- writing activities, the writing process, and collaborative writing and feedback. The third theme, *Classroom Context and Infrastructure for ICT Integration*, comprises three subordinate themes addressing ICT resources and Digital infrastructure, institutional and administrative support, and classroom environment and students' readiness. The fourth theme, *Challenges and Future Direction*, includes two subordinate themes exploring challenges in integration and future directions for effective integration. These themes are generated through repeated reading of participants' narratives, coding relevant experiences, and comparing similarities and differences within and across their accounts. Related codes were grouped into subordinate themes and

subsequently organized into broader themes, while preserving the context, chronology, and individual meanings of participants' stories.

As an English Language teacher for nearly two decades, I have closely observed the various changes that have taken place in teaching and learning. Among the various changes, I have observed the growing inclusion of ICT in the language classroom. Throughout my academic and professional journey, I have witnessed teachers increasingly rely on digital technologies to support writing instruction, while simultaneously encountering numerous challenges related to technological resources, digital competence, and classroom realities. These experiences have led me to recognize that effective ICT integration is not determined only by the availability of technological resources but is deeply influenced by teachers' beliefs, pedagogical practices, professional learning, and the classroom context in which they teach.

Listening to the teachers' accounts and reflecting on my own observations deepened my interest in understanding how secondary-level English teachers experience ICT integration in writing instruction. This curiosity inspired me to explore their lived experiences, the meanings they attach to ICT, the opportunities it offers to support students' writing skills, and the challenges they navigate in their everyday classroom practice.

Thus, building on the findings presented in the previous chapter, this chapter discusses the findings in relation to the theoretical framework and existing literature, highlighting teachers' lived experiences of ICT integration, including how they perceived, experienced and adopted to technology overtime; their contextual realities of their schools and classrooms, including infrastructures and learning environments; the challenges and constrains that limited the effective integration; and their views on future directions for strengthening ICT- supported writing instruction.

Teachers' Lived Experiences with ICT Integration in Writing Instruction

With the rapid development of ICT, various digital technologies are increasingly being used to support teaching and learning. In the context of English language teaching, it offers a wide range of opportunities to enhance students' language learning experiences. In particular, writing instruction can benefit more from digital tools that support the different stages of writing. In this context, teachers' lived experiences provide valuable insight into how ICT is understood, adopted, and implemented in everyday classroom practices.

Rather than simply examining the use of technological tools, this study explores how teachers make sense of ICT integration into writing instruction throughout their everyday teaching experiences. These experiences are shaped by their interactions with students, the context in which they teach, the resources available to them, and the support they get from their school. Thus, I felt that exploring these narratives, I could gain a deeper understanding of how ICT is perceived and experienced in real classroom settings.

My research participants described beginning their teaching career with limited access to digital resources. Shiva recalled beginning to teach with "*nothing except a chalkboard and textbooks,"* while Deepak initially viewed ICT as suitable only for well-equipped urban schools. The other two participants, Maya and Jamuna, similarly described limited use of technology and reliance on conventional teaching resources. These accounts illustrate how resources constrained the teachers' early writing instruction. A similar experience is consistent with Bingimlas (2009), who identified limited access to technological resources, insufficient teacher competence, and low confidence as major barriers to ICT integration in teaching and learning.

Tonder et al. (2016) likewise emphasize that teachers' ICT practices are explored through continuous professional learning, collaboration, and a supportive school environment. Most recently, I found that Akram et al. (2022) identified teachers' experiences with ICT as shaped by their digital competence, pedagogical beliefs, and access to technological resources. Along a somewhat different line, Demissie et al. (2022) reported that professional development and institutional support play an important role in developing teachers' confidence and technology integration practices.

In this regard, my participants recounted their own journeys and experiences integrating ICT into the teaching of writing skills. Qualitative research study seeks to understand the meaning individual or groups assign to a social and human problem (Creswell & Poth, 2018). Thus, together, these perspectives provide a foundation for understanding the lived experiences shared by the participants in this study as they encountered opportunities, challenges, and evolving practices of ICT integration in writing instruction across classroom contexts.

Regarding this, Deepak's and Shiva's narratives illustrate this transformation particularly well. Reflecting on how it evolved over time, Deepak stated*," Earlier I*

used to think ICT was only for well-equipped urban schools…. However, after the COVID-19 pandemic, my thoughts changed. I realized that ICT integration does not always require expensive equipment. Teachers can start with simple and available technologies." In a similar line, Shiva explained:

> *At first, I thought teaching could be done effectively without ICT. However, after the COVID-19 pandemic, I realized the importance of technology. Now, I no longer see ICT as just an additional tool; it has become an essential part of teaching.*

These narratives demonstrate a shift in perceptions, with COVID -19 encouraging them to integrate ICT tools for writing instructions despite limited challenges. They considered ICT tools as an essential and unavoidable part of teaching.

Similarly, Jamuna reflected on her perception after using ICT to teach writing skills. She explained, *"ICT plays a positive role. Students can see and understand many things. They can access sample writing online and search for vocabulary. However, I feel that their habit of writing independently decreases."* This narrative illustrates that Jamuna considered ICT an important and useful tool to improve writing, as it helps develop vocabulary and supports different stages of writing, providing better vocabulary and sample writings. However, she expressed concern about the students' dependence on it.

Maya also explained the change in perception after using it in her class. Claiming it, she said, *"Initially, I considered ICT as an optional tool. But after Using Projectors and digital boards, I realized that technology can make learning interactive and engaging."*

Together, these narratives illustrate that teachers' lived experience with ICT integration into writing instruction developed gradually over time, rather than happening all at once as they utilize it in their real classroom contexts. Eventually, they conceptualized the core of the TPACK framework in that way. The teachers seemed to move from relying on traditional teaching methods to becoming more confident in using ICT as part of everyday classroom practice through self-learning (Hakkarainen et al., 2001), the COVID-19 pandemic, and their continued efforts to use available technologies despite limited resources and existing classroom

challenges. The following subthemes further illustrate how they learned to integrate, practice, and adopt ICT in writing instruction.

From the viewpoint of Vygotsky's Social Constructivist Theory (1978), teaching and learning are socially situated processes in which knowledge is constructed through interaction and mediated by cultural tools, including digital technologies. Likewise, the TPACK framework (Mishra & Koehler, 2006) emphasizes that meaningful ICT integration requires teachers to integrate technological, pedagogical, and content knowledge to support effective teaching and learning. This combination is also shaped by factors such as infrastructure, training, and institutional support (Davis, 1989).

Beginning Teaching in Resource- Constrained and Low-Technology Contexts

Even though the use of technological tools in education has been in practice for many years, their widespread use began with the COVID-19 outbreak, a critical global event (Pozo et al., 2021). While COVID-19 was unfolding worldwide, Nepali education was significantly affected by the increasing use of ICT, as schools were now able to conduct their educational activities in person (Aidoo et al., 2022). Thus, the teachers have begun integrating technological tools into their pedagogical activities to continue their classroom practices. However, as they had to shift their traditional educational practices to the ICT-facilitated classroom activities (Tkachuk et al., 2020), they experienced many hurdles. Primarily, they felt it was very challenging to adapt to the technological tools since they were barely user-friendly. Specifically, in the context of Nepali education, teachers' preparedness to do so was very low due to inadequate teacher training, infrastructural challenges, and limited access to useful technology. However, they used them because they were forced to. Thus, in this research, the teachers shared their experiences of using technological tools in their pedagogical activities.

From the research participants' perspectives, it was found that the teachers' lived experiences with ICT integration in writing instruction were not simply about using technology. Their narratives describe how they experienced learning, adopting, adapting to, struggling with, and gradually accepting ICT in their own teaching context. It incorporated their initial experience with ICT, explained how learning ICT gradually develops through experience, and considered the COVID-19 pandemic a turning point. Besides, it included their experience using simple, readily available

technologies, their gradual growth in confidence and ICT use, their experience balancing traditional teaching with digital technologies, and their experiences of opportunities and challenges in ICT integration.

Regarding the participants' lived experiences of ICT integration in writing skills, they explained how they first encountered it. Deepak shared his initial experience with ICT use, especially given the limited ICT resources. He said, "*When I first joined the school, we had very limited facilities. Teaching writing skills was mostly based on textbooks, blackboards, and notebooks."* In a similar note, Shiva said*, "In the beginning, we had nothing except a chalkboard and textbooks. We had very limited access to technology. Gradually, facilities have improved, but our school still does not have the same level of resources as urban schools."*

Another participant, Maya, also explained her experience in similar lines. She said, *"When I began teaching in school, I relied mostly on traditional teaching methods such as textbooks, charts, blackboards, and group discussions. But these days, over the last few years, I started to use ICT tools."* From Maya's narratives, I found that the teachers' journey with ICT integration began in classrooms with limited access to technological resources and a reliance on traditional teaching practices. At the beginning of their teaching careers, teachers relied mainly on textbooks, blackboards, notebooks, charts, and group discussions, as the Social Constructivist theory proposed, while access to computers, projectors, and the internet was either unavailable or very limited.

Thus, these lacunas prevented them from conducting their classroom activities as TPACK theory suggests. These accounts suggest that ICT was not initially embedded in their classroom practices because schools lacked the necessary infrastructure and resources. That is why the participants began their teaching careers using conventional, teacher-centered approaches to writing instruction rather than technology-supported pedagogies, contradicting Tkachuk et al. (2020). However, despite their willingness to incorporate technological tools into education (Aidoo et al., 2022), they were unable to do so.

COVID -19 as a Turning Point and Growing Confidence in ICT Integration

The COVID-19 pandemic hit hard, affecting every sector. The education sector was significantly affected by evolving trends in traditional pedagogical practices (Tadesse & Muluye, 2020). Although many countries have been using

technological tools in their education systems, many developing countries still rely on traditional approaches. In such a context, the COVID-19 pandemic forcefully directed them to go virtual as the whole world was working from home. Thus, though the teachers at that time used ICT forcefully, creating space for emergency remote learning (Rahiem, 2020), they were initially confused but gradually built confidence (Napitupulu et al., 2024). and became somewhat habituated to it. So, they regard the COVID-19 pandemic and the forced use of ICT in education as the participants' turning point in this research.

The participants consistently described the COVID-19 pandemic as a significant turning point in their experiences with ICT integration. In this regard, Deepak said, *"After COVID-19, I started using ICT most often. I have seen many students get access to mobile phones and internet connectivity. I started to consider it as important to use in my classroom."* From his experience, I found that the pandemic broadened his understanding of ICT and encouraged him to consider simple technologies as useful resources for supporting writing instruction.

Jamuna also described how rarely she integrated ICT before the pandemic. For this, she explained, *"At the beginning, while teaching in my classroom, I rarely used ICT because we did not have the necessary facilities at our school. But after the COVID-19 pandemic, these days I find it difficult to teach without ICT."* From her narratives, I noticed how the pandemic encouraged teachers to adopt technology and gradually integrate it into their regular teaching process.

I identified that Shiva also viewed COVID-19 as an important milestone in his professional journey. To claim this, he stated, "*The use of ICT increased after COVID-19. The need for online classes brings me close to technology."* He further stated, *"Before, I used to think effective teaching was possible without ICT. But these days, I realized the importance of technology."* From his narratives, too, I identified how the experience of online teaching transformed his view of ICT from an optional resource to an important component of teaching and learning.

I found Maya's changed experience, too. For this, she explained, *"I used to take ICT as an additional tool. That was not very important in the classroom. However, after the COVID -19 pandemic, I found its importance in education."* Her narrative shows that the pandemic made her recognize the pedagogical value of ICT and to integrate digital technologies more purposefully into her teaching.

All participants' stories show that the COVID-19 pandemic provided an opportunity to integrate ICT into writing instruction. Although the pandemic encouraged them to adopt ICT more actively, the narratives also revealed that their confidence in using technology developed gradually. None of the participants considered themselves highly proficient in it. Instead, I recognized that they began to feel comfortable training to use technology effectively and meaningfully. In regards to these, teachers have expressed their viewpoints. Deepak said, *"I can use tools like; PowerPoint, YouTube, Google Docs, and messaging applications. I feel comfortable with these tools. But I sometimes feel uneasy using different applications because I have not received any training."*

Jamuna also explained her experience in this regard. She said, "*I am not very confident to using basic tools like projectors, videos, and presentations."* Likewise, I noticed Shiva also shared a similar experience. He said, *"I feel confident in using tools such as projectors, PowerPoint, YouTube, and Google Docs. I also want to learn new tools now." However, I still need to learn more about advanced applications."* Similarly, I noticed Maya also described herself as moderately confident. She said, *"I feel little confidence in using projectors, digital boards, videos, and presentation software. However, I still need more training on advanced applications and digital writing tools."*

These narratives suggest that the COVID-19 pandemic provided teachers with opportunities to engage with digital technologies, but confidence did not develop immediately, contrary to findings reported by Napitupulu et al. (2024). Instead, it developed over time through continued practice, self-study, experimentation, and classroom experience, as their attitudes were shaped by their experiences (Jimoyiannis & Komis, 2007). Even after gaining experience, the participants continued to recognize their own limitations through their experiences and learning from their co-teachers, as Social Constructivist Theory emphasizes knowledge construction (Vygotsky, 1978), and emphasized the need for continuous professional development to strengthen their integration of ICT into writing instruction, as the TPACK framework suggests how the integration of ICT can be realized (Mishra & Koehler, 2006), by teachers.

Teachers' ICT Practices in Writing Development

ICT has become an important part of English language teaching by providing teachers with innovative ways to support students' language learning and writing development. This helps teachers integrate digital technologies, communication tools, multimedia resources, and online platforms to create an interactive, engaging, and learner-centered classroom (Chapelle & Sauro, 2017). It not only serves as a means of presenting information, but ICT also supports the development of language skills by encouraging communication, collaboration, vocabulary learning, and active participation in classroom activities (Vicentini & de Oliveira, 2018).

That is why I realized that teachers can create authentic learning experiences that help students develop language skills through technology such as multimedia resources, online platforms, educational videos, presentation software, and collaborative writing tools (Kalyani, 2024; Msafiri et al., 2023). So, believing that the use of ICT can help teachers design their pedagogical activities to be more interactive and thus more fruitful, I explored my participants' experiences with ICT integration into their writing instruction in this research.

Writing is widely considered a recursive process that includes planning, generating ideas, drafting, revising, editing, and receiving feedback before producing a final text (Flower & Hayes, 1981; Sowell, 2022). ICT plays a key role in every stage of the writing process by providing authentic materials, writing models, online dictionaries, vocabulary tools, collaborative platforms, and instant feedback (Vicentini & de Oliveira, 2018; Warschauer &Ware, 2006). A recent study shows that when teachers intentionally integrate ICT into lessons, digital tools can boost students' active participation in writing tasks, peer collaboration, self-reflection, and language accuracy (Almerich et al., 2024; Liu et al., 2024). Likewise, in the previous study, I noticed that González-Laguna et al. (2026) also found that technology-supported writing instruction enhances students' planning, drafting, revising, and editing. At the same time, meaningful access to these tools increases student engagement and classroom participation (Majdoub et al., 2025).

However, I also found that the effective use of ICT depends not only on the availability of technology but also on teachers' pedagogical practices. The teacher's role is major in selecting appropriate digital tools, designing meaningful learning activities, facilitating interaction, and providing continuous support and feedback

throughout the writing process (Mishra & Koehler, 2006). Thus, I also identified that by integrating technology with appropriate pedagogical strategies, teachers can create interactive learning environments that promote language development, critical thinking, creativity, and collaborative learning (Charles-Zalakoro, 2024).

In this study, narratives about participants' experiences of ICT integration in teaching writing revealed that ICT had become an integral part of their classroom practices. Although the participants worked in different school contexts and possessed varying levels of ICT proficiency, they described similar ways of using digital tools in writing instruction. Their experiences indicate that ICT was used not only to display information but also to facilitate students' engagement in various writing tasks, support different stages of the writing process, and improve language learning. To make the writing lessons more interactive and meaningful, the participants used a variety of digital technologies, including projectors, digital boards, YouTube Videos, Google Docs, PowerPoint presentations, Mobile Phones, and internet resources.

The narratives regarding the participants' experience of ICT integration in teaching writing revealed that ICT had become an integral part of their classroom practices. Although the participants worked in different school contexts and possessed varying levels of ICT proficiency, they described similar ways of using digital tools in writing instruction. For instance, Deepak described using ICT to improve students' writing. He explained that he encouraged students to search for vocabulary and meanings, and to strengthen their writing by working together on digital platforms. As he shared, *"Students use spell-check, search vocabulary, and collaborate through a messenger group and sometimes through Google Docs. I also use it to download online videos, pictures, and model writing."* He also used online videos, pictures, and authentic internet resources to introduce topics and stimulate students' thinking before they began.

Jamuna also shared her experience with ICT integration, emphasizing its use for accessing authentic learning resources that supported both writing and language learning. She explained, *"Students search for vocabulary and writing examples, and I also use templates available online."* She believed that exposing students to model texts and online resources helped them organize their ideas more effectively and improve their written expression. Further, Shiva reflected on how his teaching practices gradually changed as he became more familiar with technology. As he

explained, *"I downloaded templates and started using Google Docs."* He found that these tools enabled students to draft, revise, and edit their work more efficiently while allowing him to provide comments and feedback during the writing process. Similarly, Maya described using projectors and Digital boards to support writing instruction through visual and multimedia resources. She stated, *"I show videos, pictures, model texts while teaching essays, reports, emails, summaries because these materials are helping students to understand writing structure.* She also noted that ICT increased students' attention and participation during lessons.

Across all four narratives, their experiences indicate that ICT was not used solely as a technological tool to display information but as a practical teaching resource embedded in daily classroom activities to facilitate students' engagement in various writing tasks, support various stages of the writing process, and improve language learning, according to the Social Constructivist Theory. To make the writing lessons more interactive, meaningful and creative (Charles-Zalakoro, 2024), the participants used a variety of digital technologies such as projectors, digital boards, YouTube Videos, Google Docs, PowerPoint presentations, Mobile Phones, and internet resources, which indicated how ICT became part of their routine pedagogical practice to create a more engaging, interactive, and learner- centred writing classroom, as the TPACK framework suggests. The coordinating themes below describe how the participants integrated ICT into their classroom practices. They are: ICT for pre-writing activities, ICT for supporting the writing process, and ICT for collaborative writing and feedback.

Teachers' Experience on ICT Integration for Pre-Writing Activities

In the context of a fast-paced world, technology has been reshaping trends across sectors, including education. That is why the use of technology in education is important, not just to achieve the goals of instructional practices but also to make them more interesting and engaging. Specifically, its use in writing skills has been very effective and productive (Batanero et al., 2021). In other words, the use of ICT in language classrooms to improve students' writing performance also enhances their overall language performance (López Henao, 2017). Thus, it not only promotes students' writing skills but also builds their confidence in learning the language, especially English, which is not their native language (Chua et al., 2019). In this

regard, the participants in this research also described using ICT mainly during the pre-writing stage to prepare students for writing tasks.

The participants said that they used pictures, videos, PowerPoint presentations, and online materials to introduce topics and support learning. According to the participants, these digital resources helped students activate their prior knowledge, generate ideas, and become interested in writing tasks. Instead of asking students to write immediately, the teachers first used ICT to introduce the topic, encourage discussion, and help students think through their ideas related to it. These practices suggest that the participants viewed ICT as a useful resource for supporting students during the initial stage of the writing process.

In this regard, Deepak explained that he usually begins his writing lesson by presenting visual materials to stimulate students' thinking before writing. He said, *"Usually, I start by showing a picture or a short video using a projector. Then, I ask students to discuss their ideas in groups. After brainstorming, students write paragraphs or short essays."* His narratives suggest that ICT serves as a stimulus for activating students' background knowledge. Using pictures and videos encourages students to share ideas and discuss the topic before they start writing.

Similarly, I found that another participant, Jamuna, considered multimedia resources useful for preparing students for writing. To claim this, she said, *"especially for teaching essays, I show them videos related to it using a projector. Then I also ask them to discuss topics, take notes, and ask them to find the information using Google search."* To clarify further, she shared one classroom activity that shows how she used ICT during the prewriting stage. She said, *"To teach the biography of Mala, I presented her speech through a video presentation. Later, I asked them to write her biography. They all wrote well."* From her narratives, I identified that videos and other audiovisual material help students understand the topic and build their background knowledge. This helps students think about the topic before organizing their ideas and beginning to write.

Shiva also valued multimedia resources for supporting pre-writing activities. Reflecting on his teaching experience, he explained, *"Before COVID-19, we occasionally took students to the theatre room to watch educational videos or listen to audio recordings. For writing classes, I used downloaded templates from the internet."* He also explained that students often search for vocabulary and writing

ideas before beginning a writing task. This helped them generate ideas and prepared them to write.

Along similar lines, I identified Maya describing ICT as a motivational factor that prepares students for writing. She said, *"Before I ask them to write, I show some relevant pictures and videos. I ask them to discuss and generate ideas for writing on it."* From this, I found that ICT supports the pre-writing stage by encouraging discussion, organizing ideas, and helping students build confidence before they begin drafting.

Considering the narratives of all teachers about their ICT integration during prewriting, I found that ICT's role is crucial at this stage, too. From the narratives, I revealed that they used pictures, videos, and other multimedia resources to encourage brainstorming, discussion, and idea generation. Instead of asking students to write immediately, I noticed that the teachers first gave them time to observe, discuss, and think about the topic. The teachers revealed that these activities helped their students to build background knowledge, organize their ideas, and participate more in writing activities, as Batanero et al. (2021) found.

Thus, as TPACK suggested, the use of ICT tools in language teaching, particularly for writing skills, was found to be highly beneficial in this research. In addition, the use of ICT in the ELT classroom during writing-skills instruction promoted idea generation among the participants and their students through collaboration, as proposed by the Social Constructivist Theory.

Teachers' Experience of ICT Integration for the Writing Process

Writing is an important yet challenging language skill because it requires learners to do much more than put words on paper. They need to be involved in generating ideas, organizing them logically, expressing their thoughts clearly, and communicating effectively for a specific audience and purpose (Khudaverdiyeva, 2025). Unlike speaking, writing gives learners the opportunity to think, reflect, revise, and improve their work before producing a final version. To write the text effectively, learners need not only good grammar, vocabulary, and sentence structure but also higher-order thinking skills such as planning, organizing, evaluating, and revising their ideas (Hyland, 2018). For this reason, I found writing is widely considered not as a one-time activity. Rather, it is a cyclical process involving planning, drafting, revising, and editing, through which learners progressively develop and refine their

texts (Rashid et al., 2022). It should be taught as a process instead of focusing on the final product (Murray, 1972). Building on this idea, Sowell (2022) also explains that writing is not a linear process but a recursive one, in which writers repeatedly plan, draft, and revise.

Studies indicate that writing is a process involving multiple stages and that ICT plays an important role at each stage. Digital tools enable students to generate ideas, organize their ideas, draft texts, receive feedback, revise, edit, and publish their work more effectively (Chapelle, 2003). Besides, according to the studies I found, digital technologies such as word processors, collaborative platforms, and online feedback tools also encourage students to refine their writing through multiple drafts (Beatty, 2013). This shows that writing is a recursive activity involving different stages such as planning, drafting, revising, and editing, in which ICT plays a prominent role in making writing interactive, collaborative, and learner-centered, as Vicentini and de Oliveira (2018) suggest.

However, in this study, participants appeared to differ in their use of ICT. Although the participants differed in their level of ICT expertise and the technological resources available in their schools, their narratives consistently reflected the pedagogical use of ICT to support students during the writing process. Deepak, one of the research participants, explained that ICT became an important tool for improving students' writing by supporting revision, language development, and teacher feedback. He shared, *"Students can use spell-check features, search vocabulary, and collaborate with classmates while writing."* He further described how students shared their written work digitally, "*Sometimes students type their writing using their mobile phones and share it through our class Messenger group."* From Deepak's narratives, I noticed that ICT extends writing beyond producing a final draft by encouraging students to revise their work, improve vocabulary accuracy, and receive feedback from both the teacher and classmates. Similarly, the use of spell-check, vocabulary search, and group discussion in writing activities highlighted how technological tools help students throughout the writing process.

Likewise, I found that Jamuna also perceived ICT as a valuable resource for supporting students before and during writing. Reflecting on her experience, she stated, *"Students can search for vocabulary and look at different writing examples on the internet."* She further added, *"When we search online, we can find templates and*

many other resources." Jamuna's story demonstrates that she viewed ICT as a means of providing students with linguistic support before they began writing. Through templates, writing examples, and vocabulary resources, students were able to understand different writing formats and prepare themselves for writing tasks.

Further, Shiva described a broader integration of ICT into the writing process. Having gradually adopted digital technologies after the COVID-19 pandemic, he explained, *"For writing, I used downloaded templates from the internet."* He further stated, *"Nowadays, I have started using Google Docs."* Describing how students used the platform, he explained, *"Students write simple paragraphs or essays there, and I give comments for corrections."* He further highlighted the importance of revision by saying, *"They can see their mistakes immediately and revise their work."* Shiva's narrative shows how ICT encourages recursive writing by prompting students to draft, receive teacher feedback, make edits, and revise repeatedly. His experience highlights that digital platforms create opportunities for ongoing improvement rather than treating writing as a one-time activity.

Likewise, Maya described ICT as supporting students throughout the writing process by providing authentic resources and facilitating writing development. She explained, *"ICT provides access to authentic materials, sample texts, multimedia resources, and online references."* Describing her writing lessons, she further noted, *"Students created an outline and wrote their essays."* She also explained that students went back and revised their writing after getting feedback from the teacher. Maya's story shows that ICT supports writing from planning through drafting and revising by providing students with models, language tools, and opportunities to improve their work.

Considering all of the teachers' stories, I found that ICT was used throughout the writing process, not only to present lesson content. Digital technologies were used to support students in searching for vocabulary, assessing templates and sample texts, developing ideas, drafting written work, revising errors, and receiving teacher feedback. These specific digital tools varied according to teachers' confidence and available resources, but participants consistently described ICT as supporting multiple stages of writing rather than only the final written product.

These findings are in line with the process writing approach proposed by Flower and Hayes (1981), who regard writing as a recursive process involving

planning, drafting, revising, and editing, with digital technologies supporting this process (Beatty, 2013). I also found that the findings align with the TPACK framework developed by Mishra and Koehler (2006), which suggests that effective technology use occurs when teachers combine technological, pedagogical, and content knowledge. In this research, too, I found that the teachers did not use ICT simply to introduce lesson content. Instead, the ICT tools supported different stages of the writing process, such as brainstorming, drafting, revising, editing, and providing feedback. This shows how technology was integrated with writing pedagogy to enhance students' writing development.

I also analyzed the findings and found that they further reflect the principles of Constructivist Learning Theory proposed by Lev Vygotsky (1978), which emphasizes that learners build knowledge through interaction, reflection, and teacher support. In this study, too, I found that the teachers shared how they used ICT to help students explore resources, revise their writing, get feedback, and improve their work through ongoing interaction. This way, teachers can present themselves as guides to their students throughout the writing process, allowing them to integrate ICT and gradually improve their writing skills. The findings are also consistent with previous research showing that ICT supports different stages of the writing process by helping students generate ideas, organize content, draft, revise, edit, and provide feedback through digital tools (González-Laguna et al., 2026).

ICT Integration for Collaborative Writing and Feedback

Collaborative writing is an instructional approach where two or more learners work together to produce a shared piece of writing. In this process, learners work together to generate and exchange ideas, negotiate meaning, make joint decisions about content and organization, and support each other in developing the text (Storch, 2013). Instead of writing independently, students are actively involved in discussion, reflection, and problem-solving, which leads them to develop their writing skills and their understanding of the topic.

The use of ICT has also strengthened collaboration by enabling learners to communicate, exchange ideas, and provide feedback through digital platforms. Digital tools such as Google Docs, Microsoft Word Online, wikis, and learning management systems encourage active participation, improved interaction, and collaborative learning, thereby making writing more engaging (Vicentini & de Oliveira, 2018).

In this study, the participants' narratives revealed that ICT also supported collaborative learning and feedback during writing instruction. Although collaborative writing was not practiced equally by all participants, they described using ICT to encourage students to share their writing, receive teachers' comments, discuss common writing problems, and revise their work in response to feedback. From these teachers' experiences, I found that ICT not only facilitated communication between teachers and students but also created opportunities for collaborative learning and continuous improvement throughout the writing process.

In this regard, while going through the narratives of the teachers, I found all four participants had varied experiences. Among the four of them, I noticed Deepak described how digital communication platforms allowed students to share their writing and receive feedback from both the teacher and classmates. He said, *"I found students sometimes type their writing using their mobile phones and share it through our class Messenger group. Later, I provide them feedback."* He further stated, *"They also search for vocabulary using a tool."* From Deepak's narratives, I found that ICT facilitates collaboration by allowing students to exchange ideas, discuss language errors, and learn from one another's writing. I also found in their stories that, rather than receiving feedback only from the teacher, students actively participate in reviewing and discussing their written work, making the writing process more interactive and collaborative.

Similarly, Shiva explained how Google Docs had changed the way he provided feedback to students. He stated, *"Nowadays, I have started using Google Docs."* Describing his classroom experience, he explained, *"Some students write there. Because not everyone has digital devices, those who do write simple paragraphs or essays there, and I give comments for correction.* He further added, *"They see their mistakes immediately and revise their work."* Shiva's narrative suggests that Google Docs enabled continuous interaction between the teacher and the students through the writing process. Instead of waiting until the final draft, I identified that their students received timely comments, revised their writing, and improved their work in response to the teacher's feedback. This helped his students to reflect on their writing and make necessary improvements. However, unequal access to digital devices consistently hinders his effective integration of ICT into writing in his classroom practice.

The other two participants, Jamuna and Maya, did not explicitly describe collaborative digital writing. However, they emphasized the importance of guidance and feedback in helping students improve their writing. Jamuna said, *"Students use ICT for vocabulary and look for different examples on the internet."* Similarly, Maya said, *"I don't use any ICT tools as such for collaboration. I ask students to search for vocabulary, and also, I give them templates for writing essays."* Their narratives indicate that feedback was an important part of writing instruction regardless of the technological tools being used.

Collectively, the teachers' experiences show that ICT created opportunities for collaborative learning and formative feedback during writing instruction. Digital platforms such as Google Docs and Messenger helped students share their writing, receive teacher comments, discuss common mistakes, and revise their work more efficiently than through traditional paper-based methods. This ultimately encourages greater interactions and supports writing improvement. I found these findings consistent with the TPACK framework developed by Mishra and Koehler (2006), which emphasizes that technology becomes educationally meaningful when teachers purposefully integrate digital tools with appropriate pedagogical strategies.

In this research, I found that the participants not only used Google Docs and Messenger for communication but also integrated these tools to facilitate collaborative writing, provide feedback, and support students' writing skills. The above findings can be reflected through the lens of Constructivist learning theory (Vygotsky, 1978), which views learning as a socially mediated process in which knowledge is constructed through interaction with others. By motivating students to share their writing, discuss errors, and change their work based on the teacher's feedback, I identified that the teachers had created opportunities for collaborative knowledge construction.

Additionally, I observed that the findings align with both earlier and more recent research on the use of ICT in writing instruction. Studies show that tools such as Google Docs and other collaborative platforms help students share ideas, collaborate, revise their work, and receive quick feedback, thereby boosting writing quality and engagement (Liu et al., 2024). Similarly, Almerich et al. (2024) found that when teachers use technology effectively, classrooms become more interactive and

collaborative. Another study by Majdoub et al. (2025) reported that students who actively use digital tools participate more and collaborate more effectively.

These studies collectively supported the teachers' narratives in this research study, showing how ICT promotes collaborative writing and continuous feedback when teachers use technology purposefully in writing instruction. Overall, the participants' narratives suggest that ICT can support collaborative writing and feedback by creating opportunities for interaction, timely teacher comments, shared learning, and continuous revision. However, the extent of collaborative ICT use varied among participants depending on their confidence, the technology they had, and their classroom contexts.

Classroom Context and Infrastructures for ICT Integration

The integration of ICT in writing lessons is influenced not only by teachers' knowledge and classroom practice but also by the broader educational context they work in (González-Laguna et al., 2026) and the availability of supportive infrastructure (Almerich et al., 2024). Even when teachers have positive perceptions of ICT and also have a willingness to use digital technologies, their pedagogical practices are often influenced by factors such as the availability of technological resources, internet connectivity, technical support, school leadership, and students' readiness to use technology (Akram et al., 2022). These factors relate to the context and always impact whether teachers facilitate or hinder meaningful integration (Bowman et al., 2022) in classroom instruction.

In the context of language teaching, particularly in writing instruction, the classroom context and infrastructure play an important role in shaping how ICT is integrated into teaching and learning (Adhikari, 2024). Access to computers, projectors, smartboards, mobile devices, digital learning materials, and a reliable internet connection helps teachers create more interactive and student- centered writing activities (Tondeur et al., 2017). In a similar way, the supportive school environment, including strong leadership, clear ICT policy, technical support, classroom size, and opportunities for professional development for teachers, also impacts how effectively ICT can be used in writing instruction (Almerich et al., 2024).

While considering the above structural and environmental factors, this study is guided by the interpretivist paradigm, which recognizes that the teachers' experiences

are shaped by the contexts in which they teach. Likewise, a qualitative research approach helps researchers understand how teachers interpret their experiences and respond to the educational contexts in which they work (Creswell & Poth, 2018).

Informed by these perspectives, this study presents teachers' narratives illustrating how their classroom contexts shaped their experiences of ICT integration into writing instruction. In this regard, Deepak explained, *"The biggest problem is limited infrastructure, slow internet connectivity, and many students lack personal devices."* Likewise, Jamuna stated, *"The biggest challenge is infrastructure, frequent power cuts, and not all students have access to devices. Also, we are not very familiar, lack of training".* Similarly, Shiva remarked, *"The school has projectors and internet access, but we have limited projectors and need to wait for our turn, and the internet is weak. We also lack technical support."* In contrast, Maya shared, *"Our school is supportive. We have projectors in most classrooms, and digital boards have recently been introduced. But still, I think I need technical help, because I feel awkward in front of my friends for not knowing how to solve technical errors."*

Throughout the teachers' narratives, I found that their ability to integrate ICT was influenced by the availability of technological resources, institutional support, and the overall classroom environment. I also noticed that some teachers worked in schools with adequate digital infrastructure and supportive leadership, while others faced challenges such as limited infrastructure, unreliable internet access, and insufficient technical support. The teachers also noted that effective ICT integration into classroom instruction is influenced by factors such as the students' access to digital devices, digital literacy, and classroom conditions. They described using ICT to help students generate ideas, organize their thoughts, and revise their writing. However, Jamuna's experience showed how unreliable internet could limit what teachers were able to do in the class. She explained, "*I want to use technology for teaching writing but when I search the content and connect them to class, internet buffers, I have to skip it and make excuse to my students".* She further added*, "I plan the lesson to deliver using ICT and with internet connection but the lesson ruins."* Her account highlights a practical consideration of writing instruction: teachers need to choose activities that fit the resources available in their classrooms. For example, if an online activity disrupted, students can continue drafting offline and share their work for feedback. As a whole, these narratives reveal that although the participants worked

in different school contexts, the availability of ICT resources, institutional support, and classroom conditions shaped both the opportunities and the challenges they experienced while integrating ICT into teaching writing.

In this way, this coordinating theme explores the contextual and infrastructural factors that shaped participants' ICT integration in writing instruction. It provides an overall understanding of the classroom environments in which the participants taught and the factors that either supported or limited their use of technology. To explain these experiences in detail, this theme is discussed under three subordinate themes: Availability of ICT resources and digital infrastructure, which examines the technological facilities available in schools; institutional and administrative support, which focuses on school leadership, ICT policies, technical support, and professional development opportunities; and the last one is classroom environment and students readiness, which explores students access to digital devices, digital literacy, class size, time allocation, and other classroom conditions influencing ICT integration in teaching writing.

Availability of ICT Resources and Digital Infrastructure

Successful integration of ICT into teaching and learning is largely impacted by the availability of ICT resources and digital infrastructure (Shah, 2022). Although teachers may possess positive attitudes and sufficient pedagogical knowledge, the effective use of ICT largely depends on whether the schools provide sufficient technological facilities and a supportive digital environment (Demissie et al., 2022). What I found in previous studies was that access to digital technologies such as computers, projectors, smart boards, stable internet connectivity, digital devices, and educational software enables teachers to design interactive and student-centered learning activities. The limited technological resources and poor digital infrastructure make it difficult for teachers to integrate ICT effectively into pedagogical practices (Mishra & Koehler, 2006).

In ESL classrooms, ICT provides teachers with a range of tools to support students throughout the writing process. For instance, the digital resources such as multimedia, collaborative platforms, and online writing tools can make writing more interactive by helping students generate ideas, draft, revise, and receive feedback (Vicentini & de Oliveira, 2018). However, the effective use of these ICT tools in writing instruction depends on the availability of adequate infrastructure, reliable

internet access, and digital devices (Tondeur et al., 2017). Thus, the availability of ICT resources plays a significant role in shaping the teachers' instructional practices.

Guided by the interpretivist paradigm, this study recognizes that the teachers' experiences of ICT integration are shaped by the classroom environments in which they teach. Their narratives show how the availability of ICT resources and digital infrastructure influenced their everyday teaching of writing. Although all four participants acknowledged the importance of ICT, I identified them responding to their differences in the availability of technological resources across their schools. Their experiences also showed that the availability of technical resources, such as access to projectors, computers, internet connectivity, digital devices, and technical support, either allowed or constrained their classroom practices.

In this regard, Shiva shared the limited ICT resources available in his school by stating, *"When I first joined the school, we had very limited facilities. There was no computer lab, no internet connection, and not even a projector."* He further added, *"The biggest problem is limited infrastructure. We have poor internet connectivity and frequent power cuts. Many of my students do not have a personal device."* From these narratives, I found that although ICT resources in his school had gradually improved, challenges such as limited infrastructure, unreliable internet connectivity, inadequate training, and students' limited access to devices continued to influence how he integrated ICT into writing instruction.

Similarly, Jamuna highlighted the influence of infrastructure on ICT integration by saying, *"The biggest challenge is infrastructure. We don't have equipped rooms. The internet is also poor. We have been facing power cuts, and not all the students have access to devices. Another thing is the lack of training."* Her narratives show that contextual limitations such as inadequate infrastructure, poor internet connectivity, unreliable electricity, limited professional training, etc, reduce teachers' ability to implement ICT-supported writing activities, even when they recognize its educational value.

Likewise, Shiva explained, *"The school has provided projectors and internet access, but the internet connection is not always reliable. We also lack technical support."* From his narratives, I learned that although his schools have gradually introduced ICT resources such as projectors and internet access, unreliable connectivity and limited technical support continue to hinder their effective use in the

classroom. His experience suggests that simply having technology is not enough. The successful integration also depends on reliable infrastructure and technical support from the school where the teacher works.

In contrast to Shiva, Maya shared a positive experience with the availability of ICT resources and infrastructure. She explained, *"In my school, we have projectors in most of the classes. In a few classes, we also have digital boards. I get good support from my school, but still, I realize we need to improve our internet connection."* From Maya's narrative, I found that although ICT resources were more readily available in her school, unreliable internet, occasional power interruptions, and limited access to digital devices affected the effective use of technology during writing instruction.

Considering all of the teachers' perspectives, I found that the availability and quality of ICT infrastructure played a significant role in shaping their classroom practices. Although the availability of ICT resources varied across schools, unreliable connectivity, limited access to digital devices, inadequate technical support, and infrastructure-related challenges hindered the effective integration of ICT into writing instruction (Almerich et al., 2024). I recognized from the findings that successful ICT integration depends not only on the availability of technological resources but also on reliable infrastructure, ongoing technical support, and equitable access to digital technologies. This finding is also consistent with another previous study by Shah (2022), who notes that poor infrastructure, unreliable internet, and insufficient technological resources remain major barriers to effective ICT integration in schools.

Similarly, these findings can be understood through the lens of the interpretivist paradigm, which recognizes that teachers' experiences and instructional practices are shaped by the social and contextual environments in which they work. The participants' narratives show how school resources, institutional support, and students' access to digital technologies influence their decisions about when and how to use ICT in writing instruction. "Likewise, qualitative inquiry seeks to understand teachers' experiences and the meanings they assign to them within their specific educational contexts (Creswell & Poth, 2018)." The stories of the teacher in this study demonstrate how they continually negotiated both opportunities and challenges as they integrated ICT into their writing practices. Together, these findings highlight that improving ICT resources and digital infrastructure is important for enabling teachers to integrate ICT effectively into writing instruction.

Institutional and Administrative Support for ICT Integration

Institutional and administrative support plays a key role in helping teachers successfully integrate ICT into their classroom practices. For that, ongoing professional development, school leadership, access to resources, and technical support create conditions that enable teachers to adopt new teaching approaches (Gigante & Firestone, 2008). That is why I recognized that for a teacher to effectively utilize new techniques in classroom practice, institutional and administrative support plays a vital role. Reviewing the previous studies, I found that when teachers receive adequate institutional support, they are more likely to develop the confidence, competence, and motivation needed to integrate digital technologies into their pedagogical practices (Napitupulu et al., 2024). On the other hand, the limited administrative support, insufficient training, and inadequate technical assistance often hinder the effective use of ICT in teaching and learning (Almerich et al., 2024).

Through the lens of the interpretivist paradigm, teachers' experiences of institutional support are shaped by the social and organizational settings in which they work (Naaz, 2025). Similarly, qualitative inquiry explores teachers' experiences and perspectives to understand how school support shapes their everyday teaching practices (Creswell & Poth, 2018).

Aligning with these perspectives, the teachers' narratives show that institutional and administrative support shaped their experiences integrating ICT into writing instruction. Their stories show that although some participants received limited or short-term ICT training, they generally perceived the space for professional development as insufficient for real classroom use. Thus, they urged the need for continuous hands-on training, stronger technical support, and greater institutional support to make ICT in writing classes more effective.

The following narratives from the teachers clarify the above findings well. The first participant, Deepak, reflected on the support he received by saying, *"I have attended a few short-term trainings... However, most of these trainings were very general and theoretical... We need practical and continuous training that focuses on classroom implementation rather than theory."* From Deepak's narrative, I learned that he has been receiving institutional support through short-term ICT training organized by the municipality, particularly during and after the COVID-19 pandemic. But he thought these training sessions were not sufficient for him to address real

classroom teaching. It was because those training sessions mainly focused on theory rather than practical classroom implications, especially in teaching writing skills.

In a similar tone, Jamuna also desired professional development training and technical support. Explaining this, she said, "*Till now, I have not received training related to ICT. I learned by looking at others, using some YouTube videos, and also from my own classroom teaching."* From her narratives, I observe that she has never received any formal ICT training. Instead, she learned to use them mostly on her own initiative, sometimes seeking help from digital platforms and observing colleagues. Besides, her school has limited resources; she felt that institutional support remains insufficient, particularly for practical ICT training and technical assistance.

Shiva also commented along similar lines to Jamuna. He stated, *"I have not received much formal training... I learned by watching YouTube videos, asking colleagues, and experimenting on my own."* He stated that he had received only a brief orientation on online teaching during the COVID-19 period. Most of his ICT knowledge was acquired through self-learning, YouTube tutorials, and discussions with colleagues. While the school had installed projectors and internet facilities, he pointed out that technical support was largely absent.

Likewise, Maya also commented, *"I have attended a few school-based orientations... Most of what I know comes from self-learning and guidance from others... I would like more practical, hands-on training focused specifically on integrating ICT into language teaching and writing instruction."* From her narratives, it is evident that her school was generally supportive, having introduced projectors and digital boards. She also benefited from informal professional support through her husband, an educational resource person, who regularly shared information about ICT initiatives and educational technologies. Nevertheless, she emphasized that more practical ICT training and stronger technical support would further enhance classroom implementation.

Overall, the participants' narratives reveal that institutional and administrative support was an important contextual factor shaping ICT integration in writing instruction. Although some participants received limited support and short-term training, they emphasized that these opportunities were largely theoretical and insufficient for classroom implementation. Besides, those training sessions did not help the teachers teach language skills and aspects more effectively. Consequently,

most participants relied on self-learning (Hakkarainen et al., 2001), collaboration with colleagues, and personal initiatives to develop their ICT competencies. That is why they constantly emphasized the need for continuous hands-on professional development. These findings suggest that institutional support influences not only teachers' ICT competencies but also their confidence and opportunities to integrate technology effectively into writing classrooms.

The above findings can be interpreted from the perspectives of the interpretivist paradigm, which views teachers' beliefs, practices, and experiences as shaped by socially and contextually constructed factors rather than existing independently of their institutional environments. In this study, too, the teachers' narratives show that their use of ICT in writing instruction is shaped by the support, opportunities, and challenges they experienced within their school. Similarly, a qualitative research approach enables researchers to explore teachers' experiences and perspectives, including how institutional contexts shape their professional learning and classroom decision-making (Creswell & Poth, 2018).

The findings also back up earlier studies. I found that Tondeur et al. (2017) emphasize that strong school leadership, a clear institutional vision, continuous professional development, and technical support are key to effective ICT integration. Similarly, I identified another researcher, Almerich et al. (2024), who stressed that factors such as administrative support, access to professional learning, and supportive organizational conditions strongly influence teachers' ICT practices. Likewise, Demissie et al. (2022) observed that teachers with institutional support and regular ICT training demonstrate greater confidence and competence in technology integration than those who rely solely on self-learning. Consistent with these studies, the participants in the present research emphasized the need for sustained hands-on training. Better technical support and stronger institutional support to successfully bring ICT into writing instruction.

Classroom Environment and Students' Readiness for ICT Integration

The environment in which teachers work and the interests of the students they teach influence ICT integration into writing skills. The successful integration of it depends not only on the availability of technological resources but also on the classroom environment and students' readiness to use technology (Shah, 2022). Factors such as students' access to digital devices, their digital literacy, classroom

size, time available for learning, and the opportunities the teachers get to use technology all influence how effectively ICT can be integrated into pedagogical practices (Majdoub et al., 2025). I realized the TPACK framework also emphasizes that meaningful technology integration occurs when teachers effectively combine technological, pedagogical, and content knowledge within the realities of their classroom contexts (Mishra & Koehler, 2006). These perspectives suggest that even a teacher with sufficient ICT knowledge may find it difficult to integrate technology effectively if students lack the necessary digital skills or if the classroom environment does not adequately support technology-enhanced learning.

Similarly, I found that previous research consistently shows that contextual factors play an important role in the successful integration of ICT. For instance, Tondeur et al. (2017) found that classroom context, students' ICT skills and interest or readiness play the key roles in shaping teachers' practice. Similarly, Almerich et al. (2024) also reported that factors such as access to digital resources, classroom environments, and pedagogical support directly influence teachers' decisions to integrate ICT. This therefore, illustrates that the classroom situation and the students' readiness are core factors for the effective integration of ICT into pedagogical practices.

Guided by an interpretivist paradigm, this study finds that teachers' experiences with ICT integration are shaped by the contexts in which they teach. From the findings, I realized that to understand teachers' experiences of ICT integration, it is important to consider the classroom context in which they work and the students' readiness to use technology. In this study, the teachers' narratives also show that factors such as students' access to digital devices, differences in ICT skills, class size, and school context shaped the integration of ICT into writing instruction. The following narratives illustrate how the classroom environment and students' readiness either supported or hindered ICT integration in teaching writing.

Deepak stated, *"Many students do not have personal devices…. I encourage students to work in groups and share devices."* His narrative reveals that students' limited access to personal digital devices affects the integration of ICT in writing instruction. Similarly, Jamuna also observed a similar situation. She said, *"I find my students get interested when I show them a video. But I also find that not all my students have devices. ICT had a positive role…... However, there is also a risk that*

they become dependent on copying information instead of creating their own ideas." Her narrative reveals that although ICT increased students' engagement and motivation in writing activities, unequal access to mobile devices and students' tendency to rely on copying online content limited the development of independent and creative writing skills.

Shiva remarked, *"Most students use their mobile phones to search for information…However, I have noticed a tendency among students to copy and paste content from the internet."* As he noted, while students frequently used mobile phones to search for vocabulary, ideas, and examples, many copied and pasted information directly from the internet. This reveals that, although the students develop vocabulary and generate information for writing, their copying and pasting of online content creates challenges in fostering originality and authentic writing.

Further, Maya explained, *"Students use mobile phones and computers to search for information…. One challenge is that some students rely too heavily on online content and tend to copy information instead of developing their own ideas."* She reported that students are using digital technologies for writing, with unequal access to digital devices and internet connectivity. This narrative reveals that although students were increasingly using digital technologies to support writing, there was an overreliance on online information, which meant teachers had to guide students in using ICT critically and creatively, not just to reproduce existing content.

Overall, the participants' narratives suggest that students' readiness and access to technology played a significant role in ICT-supported writing instruction. Although ICT increased students' engagement and access to learning resources, unequal access to digital devices and a tendency to rely on online content rather than independent writing emerged as common concerns across the participants' experiences. Hence, teachers adopted collaborative learning strategies such as group work and device sharing, while emphasizing the importance of guiding students toward critical, creative, and independent writing practices, in line with the TPACK framework's stances. From an interpretivist lens, these findings suggest that teachers were not passive users of ICT but active interpreters of their classroom realities. Rather than being confined by the context, the participants, as the Social Constructivist Theory holds, adapted their practice by adopting group work, sharing digital devices, guiding

students' responsible use of technology, and adjusting writing activities to available resources.

I also found that the findings support the work of Liu and Yusof (2024), who found that teachers' technology integration practices are shaped by their beliefs and the classroom context in which they teach. Likewise, Majdoub et al. (2025) also found that students' access to digital technologies and their level of engagement influence meaningful participation in technology-supported learning. In contrast, unequal access to technology may limit opportunities for active learning. Consistent with these studies, participants in the present research perceived that students' readiness, access to digital devices, and the overall classroom environment significantly influence students' ability to integrate ICT effectively into writing instruction. Thus, although ICT increased students' engagement and participation, the unequal access to technological resources and students' dependence on online content require teachers' continuous guidance to promote creativity, critical thinking, and independent writing.

Challenges and Future Direction

The successful integration of ICT into writing instruction depends not only on teachers' positive perceptions and willingness to use technology but also on the contextual conditions that enable or constrain its implementation (Mrosso & Ndibalema, 2024). Though ICT offers many opportunities to support students' writing development, teachers often face practical challenges in integrating it into their classroom practice. Challenges like limited infrastructure, insufficient institutional support, inadequate training, and everyday classroom realities can affect how technology is used in teaching (Alkahtani, 2017). The TPACK framework (Mishra & Koehler, 2006) highlights that effective integration of ICT requires teachers to possess not only technological knowledge but also the ability to integrate technology with pedagogical strategies and subject content.

In this, Deepak stated, *"I mostly encountered infrastructural challenges, such as unreliable internet connection, limited access to digital devices, etc."* Similarly, Shiva posed similar experiences. In addition, he said, *"I mostly faced challenges, including insufficient support from the school administration."* He further added, *"I was not provided with the IC- related training."* Given this lack, neither participant could integrate ICT into their pedagogical practices, though they showed strong willingness.

Similarly, Jamuna also said, *"I found my students relied more on digital assistance in their educational practices, which potentially could reduce their creativity."* She further added, *"The major challenge I found while integrating ICT was that the provided ICT tools were mostly worn out."* With a similar view, Maya also stated, *"The insufficient availability of digital tools and poor internet connection were the major hindrances in my ICT integration journey."* She added, *"I hated frequent power cuts at school, and we had no alternatives for that."* The participants' narratives suggest that they recognized the educational value of ICT, but had limited practical training and insufficient opportunities to develop technological pedagogical knowledge, which hinders their ability to use digital tools confidently and effectively in writing instruction.

Similarly, from the perspectives of Vygotsky's Social Constructivist Theory (1978), learning occurs through social interaction and is mediated by cultural tools, including digital technologies. ICT functions as a mediational tool that supports collaborative learning, scaffolding, feedback, and interaction throughout the writing process. However, I observed that the teachers reported that inadequate infrastructure, unequal access to digital devices, unreliable internet connectivity, and insufficient institutional support restricted opportunities for collaborative and interactive learning, thereby limiting the pedagogical potential of ICT in writing classrooms.

These findings are also consistent with some previous studies. For instance, I found that Ertmer et al. (2012) distinguished between first-order barriers, such as inadequate infrastructure and limited technical support, and second-order barriers, including teachers' beliefs, confidence, and professional competence. Similarly, I noticed that another researcher, Tondeur et al. (2017) argue that successful ICT integration requires adequate technological resources, continuous professional development, and a supportive school environment. Likewise, Akram et al. (2022) and Demissie et al. (2022) also found that limited ICT training, insufficient technological competence, and inadequate institutional support remain significant barriers to effective technology integration. More recently, I found that Majdoub et al. (2025) and Dhital (2018) also identified unequal access to digital technologies and differences in student engagement as continuing to affect teachers' ability to integrate ICT effectively into classroom instruction. Collectively, these theoretical perspectives

and empirical studies provide a comprehensive framework for understanding the challenges and future directions identified in the participants' narrative.

Challenges in ICT Integration for Writing Instruction

Teaching itself is a challenging job. We always need to revive teaching with innovative ideas. In terms of bringing about change, integrating ICT into our teaching practices is also a novel and advanced approach. However, integrating ICT into writing instruction is always a complex and demanding process because it requires teachers to combine technological knowledge with appropriate pedagogical strategies while responding to the realities of their classroom contexts (Msambwa et al., 2024). According to the TPACK framework, effective ICT integration depends on teachers' ability to integrate technology, pedagogy, and content knowledge in meaningful ways (Mishra & Koehler, 2006).

However, previous studies have shown that multiple interconnected factors always impact this process. Ghavifekr et al. (2016) argued that the effectiveness of ICT integration depends not only on the availability of technology but also on teachers' competence, school leadership, and supportive learning environments. Similarly, Dong et al. (2020) demonstrated that teachers' technological pedagogical knowledge, computer self-efficacy, and school support significantly determine their capacity to integrate technology effectively.

Further review of the studies revealed that Schmitz et al. (2022) emphasized that although technological barriers may be reduced in some educational contexts, teachers' institutional practice continues to be shaped by school conditions, pedagogical beliefs, and organizational support. More recently, I also found in the systematic review on ICT integration in secondary education by Msambwa et al. (2024) that the challenges of ICT integration fall into three broader categories: knowledge and skills, professional development, and systemic challenges. The particular review found that successful ICT integration relies on continuous teacher training, adequate technological infrastructure, supportive leadership, curriculum alignment, and strong collaboration among policymakers, school leaders, teachers, and students.

These perspectives closely reflect the experience of the participants of this study. Although the teachers considered ICT a useful resource for improving students' writing, they explained that issues such as poor internet connectivity, limited

infrastructure, lack of practical training, insufficient technical support, time constraints, and unequal access to digital devices limited its effectiveness in classroom practice. To clarify this, Deepak explained, *"There are many challenges to using technology in my classroom. The biggest problem is limited infrastructure."* He further added, *"Internet connectivity is also poor, electricity is interrupted frequently, and many students do not have personal devices. I think another problem is also because of not being given proper training and better support from the school."*

Similarly, Jamuna also emphasized that poor infrastructure prevented teachers from implementing their ICT-based instruction in writing skills. She stated:

> *The biggest challenge is infrastructure. The internet connection is poor; there are frequent power cuts, too. It hampers completing the course plan. Another thing is that not all students have digital devices. We are not given training to use ICT properly.*

Shiva also put forward similar difficulties and concerns about students' originality. He noted, *"The biggest challenge is maintaining students' originality. Many students prefer copying information from the internet rather than expressing their own ideas. Another thing is infrastructure."* He further added, *"Not all students have smartphones. There are issues related to internet connectivity and time, too."* Likewise, Maya reported, *"The major challenge is poor internet connection, limited access to digital tools for the students, and improper training for teachers.*

The above narratives illustrate that all four participants have faced similar challenges in integrating ICT into their writing skills. Their stories demonstrate that although teachers perceived ICT positively, these challenges prevented its meaningful implementation in the classroom. Across the narratives, inadequate infrastructure, unreliable internet connectivity, frequent power interruptions, limited access to digital devices, insufficient professional development, and inadequate technical support were considered the most significant challenges. Besides, two participants, Shiva and Maya, highlighted that students' dependence on online content and their tendency to copy information rather than generate original ideas posed further challenges in meaningful ICT-supported writing instruction. Moreover, Jamuna and Shiva were concerned about the time constraints for ICT integration, which hampered their course plan.

These findings suggest that teachers' willingness and their positive perspectives on ICT integration are not sufficient for successful implementation. Both external and internal factors, as described by Ertmer et al. (2016), must be favorable for teachers to make classroom practices effective in integrating ICT. These findings align with the TPACK framework (Mishra & Loehler, 2006), which stresses that teachers need a combination of technical, pedagogical, and content knowledge to use digital tools effectively in writing instruction. In this study, too, I found that the teachers' concerns about limited training and low confidence suggest that opportunities to enhance technological pedagogical knowledge remain insufficient.

Furthermore, I found Vygotsky's Social Constructivist Theory (1978) also views learning as a socially mediated process in which knowledge is constructed through interaction and collaboration. From this perspective, ICT functions as a mediational tool that supports collaborative learning, scaffolding, and communication among learners. However, challenges such as limited infrastructure, unequal access to digital devices, and technical difficulties restrict students' opportunities to participate in meaningful collaborative writing and social construction of knowledge.

The findings align with some previous research. They include external barriers (Ertmer et al. 2012), such as inadequate infrastructure and insufficient training. Similarly, the barriers include adequate resources, professional development, and a supportive school environment (Tondeur et al., 2017). Similarly, limited infrastructure, inadequate ICT competence, and unequal access to technology are major barriers to effective ICT integration (Akram et al., 2022; Demissie et al., 2022).

Overall, the theoretical instances and the previous studies' claims reinforce teachers' experiences by showing that effective ICT integration requires not only positive attitudes but also adequate infrastructure, sustained professional development, and a supportive school environment.

Future Directions for Effective ICT Integration

In today's fast-changing world, each of us must adopt 21st-century skills and knowledge to keep pace with the evolving needs of society and the economy. One of these is the use of ICT in education. However, the challenges of using it are unavoidable. Although the participants in this research also identify numerous challenges in integrating ICT into writing instruction, they remain optimistic about its future and emphasize that these challenges could be addressed through appropriate

institutional support and continuous professional development (Alemu, 2015). Simply providing technological resources is not enough for effective ICT integration. It requires sustained efforts to strengthen teachers' digital skills, improve school infrastructure, and develop supportive educational policies that encourage teachers to use ICT effectively throughout the writing process.

As we all noticed, education increasingly embraces digital transformation, it is equally important to create a learning environment where technology encourages creativity, collaboration, learner autonomy, and authentic communication rather than merely providing access to information (Kalyani, 2024). The TPACK framework (Mishra & Koehar, 2006) suggests that teachers need the knowledge and skills to integrate technology with teaching methods and content. Likewise, Vygotsky's Social Constructivist Theory (1978) views ICT as a tool that supports interaction, collaboration, and learning.

Some previous studies have consistently stressed that effective and sustainable ICT integration requires more than merely providing ICT. For instance, Alemu (2015) emphasized that successful ICT integration depends on continuous teacher professional development, adequate technological infrastructure, and technical and pedagogical support, rather than simply on providing technological resources. Similarly, UNESCO (2023) highlights the importance of reliable ICT infrastructure, equitable access to digital resources, supportive educational policies, and ongoing teacher training. Tondeur et al. (2017) also emphasize that meaningful technology integration is strengthened by continuous teacher professional development, collaborative school cultures, and institutional support.

Similarly, more recent studies also reinforce these findings. Mhlanga et al. (2024) recommended aligning the curriculum with ICT, strengthening institutional policies, promoting collaboration among stakeholders, and maintaining technological resources to support long -term technology use in schools. Supporting these recommendations, the systematic review by Msafiri et al. (2023) concludes that sustainable ICT integration requires improving teachers' technological and pedagogical knowledge, creating supportive school environments, ensuring reliable access to ICT tools, and fostering collaboration among teachers, students, school leaders, and policymakers.

Reflecting on these perspectives regarding the future direction of ICT integration into teaching writing, I demonstrated that all four participants recommended strengthening teachers' professional learning and improving school resources to support effective ICT integration. For instance, I examined that Deepak stressed the importance of practical professional development by saying, "*I need practical training that gives us guidelines to teach in the class with ICT rather than just theory. We also need good connectivity, more devices, and better technical support."*

Similarly, Jamuna, highlighting the need for classroom-oriented ICT training and technological resources shared, *"We need practical training focused on how to use ICT in teaching writing in the real classroom. School also needs better internet connections, projectors, computers, and technical support."*

Shiva also stressed the need for practical support for teachers in integrating ICT into writing instruction. He said, *"Teachers should receive hands-on training on how to integrate ICT into writing instruction. Schools also need better internet connectivity, more devices, and technical support."*

Likewise, Maya also recommended*, "I would benefit from practical, hands-on training, especially focused on integrating ICT into language teaching and writing instruction. Regular technical support and better infrastructure would also be helpful."*

Beyond infrastructure and training, the participants examined ICT tools to transform writing instruction. Maya further explained:

> *Technology will continue to play an increasingly important role in writing instruction. Digital tools can make writing more interactive, accessible, and engaging. However, teachers must ensure that students continue to develop creativity, critical thinking, and independent writing skills alongside technological skills.*

Thus, she aspires to harness the inevitable and growing role of technology in pedagogical activities in the days to come.

Overall, these narratives suggest that the participants perceived the future of ICT integration as a process of improving teaching quality rather than simply increasing technology use. They believed that effective ICT integration needs continuous teacher professional training, reliable technological infrastructure,

supportive school leadership, and equitable access to digital resources. Besides, they emphasized that ICT should be used to foster students' creativity, critical thinking, collaboration, and independent writing. These findings align with Davis (1989), who emphasizes the importance of supportive conditions for technology adoption. Also, it relates to Mishra and Koehler (2006), who highlight the continuous development of teachers' technological pedagogical knowledge. Besides, it is consistent with the Social Constructivist Learning theory of Vygotsky (1978), which views technology as a tool for collaborative learning. The findings also support the work of UNESCO (2023), Tondeur et al. (2017), Warschauer and Ware (2006), and Vicentini and de Oliveira (2018), who stressed the importance of ongoing professional learning, a supportive educational environment and the pedagogically meaningful use of ICT to enhance students' writing development

Overall, the literature and the theoretical instances suggest that effective ICT integration depends not only on access to technology but also on supportive school environments, reliable infrastructure, continuous professional development, and institutional support. Strengthening this condition in educational settings can help teachers integrate ICT more effectively into writing instruction and create learning experiences that encourage collaboration, creativity, and active student engagement.

Chapter Summary

This chapter explored the experiences of secondary-level English teachers' ICT integration into writing instruction. The findings revealed that teachers perceived ICT as a valuable tool for supporting students' writing development by helping them in different stages of the writing process, including planning, drafting, revising, editing, and giving feedback. Besides, it showed that teachers also integrated ICT to teach language skills through multimedia resources, online materials, and collaborative digital platforms, creating a more engaging and learner- centered classroom environment. The study further showed that teachers' experience with ICT integration evolved, especially after the COVID-19 pandemic, as they generally became more confident and skilled with technology through self- learning and professional development.

However, participants also highlighted several challenges, such as poor infrastructure, poor internet connection, limited digital devices, and a lack of training and technical support, and expressed concerns about students' greater dependence on

online resources. Overall, the study's findings suggest that successful/meaningful ICT integration in teaching writing skills depends not only on access to technology but also on teachers' attitudes, beliefs, pedagogical knowledge, institutional support, students' readiness, and continuous professional development. These findings provide the foundation for conclusions, implications, and recommendations in the next chapter.

CHAPTER VI
SUMMARY, KEY INSIGHTS, AND VIABLE IMPLICATIONS

This chapter presents a summary of this study, key insights, practical implications, and a reflection. In this chapter, the summary section presents the impetus for this study, followed by the research process and the major findings. It describes why the study was conducted and how the research was carried out to explore teachers' perceptions and lived experiences of ICT integration in teaching writing at the secondary level. In this chapter, I also discuss the practical implications of the findings and provide recommendations for teachers, school leaders, policymakers, and teacher educators to support the effective integration of ICT in writing instruction.

Summary

The rapid advancement of ICT and its growing use in education inspired me to explore teachers' lived experiences of integrating ICT into secondary-level writing instruction in Nepal. Although ICT has become an important part of educational practice, its integration into writing instruction remains inconsistent across schools because of differences in teachers' knowledge, available resources, and institutional support.

Having been experienced in language teaching for over fifteen years, I have had few opportunities to use ICT tools in my pedagogical practices. However, the sudden outbreak of COVID-19 underscored the urgency of its use across sectors, including education. Nevertheless, academic institutions in developing countries like Nepal were underprepared for that due to limited resources. In such a scenario, schools in Nepal could not continue their regular in-person academic activities because of the pandemic. Thus, they paved the way for virtual classes to be conducted using the available ICT tools in their schools. Many schools had to abruptly manage technology-friendly teaching and learning practices. Consequently, the tendency to integrate technology into classroom practices continued to increase worldwide, and Nepal was no exception. As a result, the students also became accustomed to its use in their academic activities.

In most cases, I found students' overreliance on ICT tools, especially in their writing. As students today keep pace with rapidly advancing technology, teachers lack

the readiness to keep pace with their students' speed. In other words, I observed that students' readiness and classroom contexts were misaligned, which made me realize that the successful integration of ICT depends not only on the technology but also on teachers' experiences, beliefs, and the environments where they teach. Furthermore, Nepali educational policy and the reformed curriculum have prioritized ICT integration in education. Writing continues to be a major language skill in school education, particularly in grades 11 and 12. However, despite its high importance, teachers tend not to integrate it into writing instruction. This triggered me to explore teachers' perceptions and experiences of using ICT in English language teaching, especially in writing instruction.

This study was guided by the TPACK framework and the interpretivist paradigm to understand teachers' experiences of ICT integration in writing instruction. Using interpretative qualitative research approach, I collected data through semi-structured interviews with four secondary-level English teachers. Later, I analyzed the collected data using he six-phase thematic analysis process outlined by Braun and Clarke (2006), identifying themes and subthemes that reflected the teachers' perceptions and experiences of integrating ICT into writing instruction.

The findings from this research revealed that the English language teachers have positive perceptions of the ICT integration into their writing instruction. They considered technological tools as an important resource for teaching writing. Using a range of digital tools such as projectors, PowerPoint presentations, Google Docs, Microsoft Word, videos, pictures, mobile phones, internet resources, etc., the teacher can support different stages of the writing process. I observed that the teachers felt integrating ICT made writing lessons more engaging by increasing students' motivation, participation, and understanding.

Despite these positive experiences, the teachers also highlighted several contextual factors that hindered effective ICT integration in their classroom practices. According to my research participants, those factors include limited ICT infrastructure, unreliable internet connectivity, insufficient access to digital devices, a lack of professional training, time constraints, and differences in students' digital skills. Despite these challenges, my participants demonstrated resilience and adaptability by downloading teaching materials in advance, continuously improving their ICT knowledge through self- learning.

However, the findings indicated that these teachers believed that school leadership, infrastructure, technical assistance, and access to digital resources were very important for them to successfully integrate ICT into their writing instruction. Similarly, I found them emphasizing the necessity of ongoing training and opportunities to share experiences with colleagues to improve ICT integration and keep pace with technological changes. Besides this, from the data, I found that the teachers' perceptions have changed through experience, particularly after the COVID-19 pandemic, their engagement with some professional development opportunities as well as through increased classroom practices. This showed their growing confidence and their willingness to use ICT after they gained experiences

Overall, the study suggests that successful ICT integration in writing instruction did not always depend on the availability of digital tools in their schools. It is more aligned with how teachers understand the value of ICT, how confident they are in using it, and how they use these tools to meet students' needs. The teachers' experiences also showed that the integration of ICT is a gradual and ongoing process. As teachers gain more experience, explore more ICT tools in their classroom practices, and reflect on those practices, they become more confident in using ICT to support writing instruction. In the meantime, their effective integration of ICT was also influenced by the support they received from their school, including access to reliable resources and infrastructure, in-service professional development opportunities, and motivation from school leadership. Therefore, the study highlights the need for regular training, improved digital infrastructure, reliable internet access, and supportive educational policies to promote meaningful and effective ICT integration in teaching writing skills at the secondary level in Nepal.

Key Insights

Two research questions guided this study to explore secondary-level English teachers' perceptions/ experiences of ICT integration in teaching writing, and the challenges they encountered during its implementation. The findings suggest that the participants held positive perceptions of ICT. They recognized it as an important educational resource that could improve writing instruction. Also, I found that ICT made writing lessons more interesting, interactive, and meaningful by providing students with visual materials, authentic resources, writing templates, and opportunities to access information. The participants viewed ICT not simply as a

technological tool but as a means of increasing students' motivation, participation, and confidence in writing.

The participants' experiences also revealed that ICT was used at various stages of the writing process. They utilized ICT tools during the pre-writing stage to activate students' prior knowledge, generate ideas, and encourage classroom discussion through videos, pictures, PowerPoint presentations, and online resources. Moreover, during drafting, students used tools such as Microsoft Word and Google Docs to compose their writing and later received teacher-supported revision through digital editing and feedback. However, the findings showed that ICT integration was mostly limited to basic digital tools and teacher-directed activities. The participants mainly used technology to present learning materials and provide feedback, depending on limited digital tools. It was also shown that the students were deprived of opportunities for collaborative writing, peer review, and independent learning through digital platforms. This indicates that teachers were familiar with ICT tools but had limited experience using them to promote student-centered writing instruction.

Another important understanding is that teachers' positive attitudes alone were not enough to ensure meaningful ICT integration. Besides, I found that although all participants recognized the educational value of ICT, several barriers affected their classroom practices. Those barriers I identified were poor ICT infrastructure, poor internet connectivity, limited access to digital devices, time constraints, insufficient technical support, lack of regular ICT training support, and varying levels of students' digital skills. I noticed that despite their willingness to use ICT in their educational practices, these challenges often forced teachers to modify their lesson plans or rely on traditional teaching methods. From this, I found that successful ICT integration not only depends on teachers' motivation but also on the availability of supportive learning environments and institutional resources.

In this study, I also found that the participants showed dedication and resilience while working within these limitations. Rather than avoiding ICT integration into their educational practice, they shared that they used different coping strategies to continue adopting technology in their writing lessons. For that, they shared that they often downloaded teaching materials. Such materials included templates and models before lessons. They also used personal laptops and mobile internet access to search for online teaching resources.

They further shared with me that they prepared alternative activities in case technology failed and learned new digital skills through self-directed learning. I found that they want different ways to improve their pedagogical practices despite limited institutional support. Thus, these narratives show that ICT integration is an ongoing learning journey. The teachers' willingness to learn, experiment with new technologies, and adopt them into their pedagogical practices plays an important role in the successful integration of ICT into their writing instruction.

Another important insight I found from the study is that the teachers viewed ICT as a means of supporting writing activities rather than a replacement for teaching. They believed that technology alone cannot improve students' writing. Instead, effective learning happens when teachers use ICT with appropriate teaching strategies, classroom interaction, and guidance. This way, I found that effective ICT integration requires blending technological, pedagogical, and content knowledge. In other words, successful ICT integration depends not only on the use of digital tools but also on how teachers use them to support students' learning in the class and beyond.

I also found that ICT integration supported the learning experiences of both teachers and students. As teachers gained more hands-on experience with digital technologies in their classroom practices, they became more confident using them during their writing lessons. They also observed that their students became more engaged and motivated to write when multimedia and digital tools were included in the lessons. In addition, from their perspectives, I found that ICT provided easier access to authentic materials and made it easier for them to revise and improve their writing. Overall, the teachers' experience suggests that ICT can support the writing process by developing activities such as planning, drafting, revising, and editing more interactive and manageable for both teachers and students.

Overall, the teachers' perceptions and experiences suggest that meaningful ICT integration into writing instruction does not occur all at once. Instead, it develops gradually as teachers gain experience, develop confidence, and learn to use technology in their classroom teaching to support their students' writing. For that, it requires openness among teachers to learning, continuous professional development, solid tech infrastructure, collaborative, reliable internet access, supportive school leadership, and clear educational policies. The result, therefore, suggests that making

ICT work effectively in writing activities requires collaborative effort among teachers, school leaders, teacher trainers, and policymakers to create learning spaces where technology truly supports students' writing skills.

Viable Implications

Writing is considered an important language skill in English language teaching at the secondary level, particularly in Grades eleven and twelve. Students are expected to develop a variety of academic and functional writing, such as essays, reports, summaries, emails, letters, newspaper articles, and other forms of academic writing. These writing tasks, according to the Curriculum Development Center, cover the major components for the final assessment. Thus, giving this emphasis, I believe it is important to develop students' writing competence through effective classroom instruction.

At the same time, digital technology has become an important part of educational practices in the twenty-first century, and it continues to influence how languages are taught and learned. I found UNESCO (2023) also emphasizes digital technologies for reshaping teaching and learning and preparing learners for the demands of the digital age. Likewise, researchers Mishra and Koehler (2006) argue that integration of technology is effective when the teacher can effectively combine technological, pedagogical, and content knowledge. In writing instruction, ICT can support students throughout the writing process by helping them generate ideas, organize information, draft, revise, edit, collaborate, and receive timely feedback.

Considering the importance of writing in the secondary-level English curriculum and the growing role of ICT in educational practice, the findings of this study offer practical implications for English language teachers, teacher educators, school leaders, and policymakers seeking to enhance writing instruction through effective ICT integration.

The findings have valuable implications for English language teachers seeking to integrate ICT into writing instruction to improve classroom practice. Participants' experiences suggest that teachers should recognize ICT as more than a technological tool. They should use it as a pedagogical resource to support different stages of the writing process, including brainstorming, drafting, revising, editing, and providing feedback. The findings also highlighted that the teachers should use digital tools such as Microsoft Word and Google Docs to develop and organize writing. Similarly, the

narratives revealed that teachers' confidence, prior experience, and access to professional development influenced how they integrated ICT into their pedagogical practices. I found that this suggests teachers may benefit from continuous opportunities to practice using ICT tools, share experiences with co-teachers, and reflect on their own classroom practices. Even in contexts where technological resources are limited, thoughtful planning and effective use of available ICT tools can support writing development.

Similarly, the findings also provide valuable implications for classroom practice. From the teachers' experiences with ICT integration into writing instruction, I found that ICT should be integrated into every stage of the writing process, not just for displaying information or presenting lesson content. Teachers can use videos, pictures, presentations, and online resources to activate prior knowledge, introduce topics, and generate ideas. For drafting, students can use digital tools such as Microsoft Word and Google Docs to organize and develop their writing. Further, for revising and editing, ICT can provide digital feedback, spelling and grammar checking, and teacher comments. Thus, by integrating ICT into the entire writing process, teachers can make writing lessons more interactive, engaging, and meaningful.

Besides this, I found that the teachers were integrating ICT into their writing lessons, particularly to introduce writing topics, provide model texts, support drafting, and give feedback. However, from their experiences, I found that there is still a need to use ICT to encourage more collaborative and interactive writing activities among students. ICT tools like Google Docs and other online platforms can create opportunities for students to share ideas, collaborate on writing, and give one another feedback by making writing more interactive and engaging. The teachers also shared that they have been using basic ICT tools, and they urged for more practical support on how to integrate technology effectively into writing practices. From these narratives, I found a need for professional development that should focus not only on introducing digital tools but also on demonstrating how to use them to support different stages of the writing process and enhance students' learning.

Further, I found that though the teachers showed positive attitudes towards ICT, they still wanted to become competent in using it through continuous professional development opportunities. Therefore, teacher education institutions,

professional development providers, and the school administration should offer regular, practical, and effective training based on the TPACK framework. Besides, these training programs should focus on practical, hands-on classroom activities that demonstrate specific classroom strategies for teaching writing skills, rather than just introducing digital tools. Moreover, they should be provided with opportunities to learn how ICT can support different stages of the writing process, and how technology can be integrated with effective teaching strategies to improve students' writing.

The findings further indicate that meaningful ICT integration in the classroom needs supportive school leadership and institutional commitment. This means investing in reliable internet, well-equipped computer labs, multimedia classrooms, and technical support to encourage teachers to use technology regularly. Besides this, the school administrators should also provide opportunities for teachers to share their successful classroom practices with colleagues and the school community, encourage them to collaborate with colleagues, and inspire them to join school-based professional learning communities. Such collaborative environments can inspire innovation and build teachers' confidence in using ICT for writing instruction.

Another important implication is for curriculum and educational policy. Curriculum developers and policymakers should support the integration of ICT into writing instruction by providing clear guidelines, sufficient digital resources, and practical examples of technology-supported writing activities. Likewise, in educational policies, ICT should be meaningfully integrated into teaching and learning rather than simply considered an additional classroom resource. In addition, greater attention should be given to developing students' digital proficiency alongside their writing skills so they can participate actively in technology-supported learning environments.

Likewise, this study contributes to the growing body of qualitative research on ICT integration in English language teaching, particularly within the community secondary schools in Nepal. This study provides useful insights into four secondary-level English teachers' perceptions, experiences, and practices of ICT integration in writing instruction, using qualitative research study. Future studies may involve larger samples, different educational contexts, or mixed-methods research to examine ICT integration across diverse educational settings. Besides, researchers may investigate

students' experiences of ICT-supported writing instruction, examine the effects of specific digital resources on writing achievement, or explore how emerging technologies such as Artificial Intelligence can support writing development. Such studies can provide additional evidence to inform improvements to ICT in English Language teaching in Nepal. Future research could explore teachers' experiences of integrating ICT into writing instruction across different regions and school types in Nepal. Studies incorporating classroom observations, students' perspectives, and a sample of students' writing could provide a fuller understanding of the relationship between teachers' perceptions and classroom practices. In the same way, longitudinal research could also examine how teachers' ICT practices develop over time, particularly following professional development or a change in institutional support.

Overall, this study demonstrates that meaningful ICT integration into writing instruction requires the combined efforts of teachers, teacher educators, school leaders, and policymakers. When the teachers receive appropriate professional development opportunities, the school provides a supportive learning environment and technical support, and educational policies ensure adequate infrastructure and equitable access to technology, ICT can be integrated more effectively to enhance students' writing skills, engagement, active participation, and overall learning outcomes.

REFERENCES

Abalkheel, A., Sourani, M., Othman, I., & Seraj, P. M. I. (2023). The impact of teachers' LoTI and ICT integration abilities on students' L2 writing competency in the context of TPACK framework. *Journal of Baltic Education Studies, 8*(1). https://doi.org/10.31559/BAES2023.8.1.1

Abel, V. R., Tondeur, J., & Sang, G. (2022). Teacher perceptions about ICT integration into classroom instruction. *Education Sciences*, *12*(9). https://doi.org/10.3390/educsci12090609

Acharya, G. P. (2025). Issues and challenges of ICT use in government and non-government schools: A study on ICT integration in the teaching-learning process in Surkhet District. *Surkhet Journal, 4*(1), 131–152. https://doi.org/10.3126/surkhetj.v4i1.86228

Adhikari, B. P. (2024). Secondary English teachers' experiences of using information and communication technology. *Journal of NELTA Karnali, 2*, 1–12. https://doi.org/10.3126/jonk.v2i1.91279

Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2005). Using information and communication technology in secondary schools in Nigeria: Problems and prospects. *Educational Technology & Society, 8*(1), 104–112.

Aidoo, B., Macdonald, M. A., Vesterinen, V. -M., Pétursdóttir, S., & Gísladóttir, B. (2022). Transforming teaching with ICT using the flipped classroom approach: Dealing with COVID-19 pandemic. *Education Sciences*, *12*(6). https://doi.org/10.3390/educsci12060421

Akram, H., Abdelrady, A. H., Al-Adwan, A. S., & Ramzan, M. (2022). Teachers' perceptions of technology integration in teaching-learning practices: A systematic review. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.920317

Alemu, B. M. (2015). Integrating ICT into teaching-learning practices: Promise, challenges and future directions of higher educational institutes. *Universal Journal of Educational Research, 3*(3), 170–189. https://doi.org/10.13189/ujer.2015.030303

Alkahtani, A. (2017). The challenges facing the integration of ICT in teaching in Saudi secondary schools. *International Journal of Education and Development using ICT*, *13*(1), 32-51. https://eric.ed.gov/?id=EJ1142266

Alkamel, M. A. A., & Chouthaiwale, S. S. (2018). The use of ICT tools in English language teaching and learning: A literature review. *Veda's Journal of English Language and Literature (JOELL), 5*(2), 29–33. https://joell.in/wp-content/uploads/2018/04/29-33-THE-USE-OF-ICT-TOOLS-IN-ENGLISH-LANGUAGE.pdf

Almerich, G., Gargallo-Jaquotot, P., & Suárez-Rodríguez, J. (2024). ICT integration by teachers: A basic model of ICT use, pedagogical beliefs, and personal and contextual factors. *Teaching and Teacher Education, 145*. https://doi.org/10.1016/j.tate.2024.104617

Alphonce, S., & Mwantimwa, K. (2019). Students' use of digital learning resources: diversity, motivations and challenges. *Information and Learning Sciences*, *120*(11-12), 758-772. https://doi.org/10.1108/ILS-06-2019-0048

Al-Zaidiyeen, N. J., Mei, L. L., & Fook, F. S. (2010). Teachers' attitudes and levels of technology use in classrooms: The case of Jordan schools. *International Education Studies*, *3*(2), 211-218. https://doi.org/10.5539/ies.v3n2p211

Anderson, J. (2010). *ICT transforming education: A regional guide*. UNESCO Bangkok. https://unesco.org/ark:/48223/pf0000189216

Arifah, A. (2014). *Study on the use of technology in ELT classroom: Teachers' perspective*. [Unpublished masters' thesis]. BRAC University. https://dspace.bracu.ac.bd/handel/10361/3999

Ashish, L., & Anitha, G. (2024). Transforming education: The impact of ICT and data mining on student outcomes. In *Proceedings of 7th international conference on circuit power and computing technologies (ICCPCT)* (Vol. 1, pp. 675-683). IEEE. https://doi.org/10.1109/ICCPCT61902.2024.10673234

Barbour, K. (2011). *Dancing across the page: Narrative and embodied ways of knowing*. Intellect.

Basnet, B. B. (2025). Use of ICT for teaching Nepali subject. *Triyuga Academic Journal*, *4*(1), 1-9. https://doi.org/10.3126/taj.v4i1.88052

Batanero, J. M. F., Rueda, M. M., Cerero, J. F., & Gravan, P. R. (2021). Impact of ICT on writing and reading skills: A systematic review (2010-2020). *Texto Livre*, *14*(2), e34055. https://doi.org/10.35699/1983-3652.2021.34055

Beatty, K. (2013). *Teaching & researching: Computer-assisted language learning* (2nd ed.). Routledge. https://doi.org/10.4324/9781315833774

Bhattarai, M. K. (2021). Information and communication technology scenario of Nepal: Assessing policy environment and challenges. *Nepal Public Policy Review*, *1*, 201-211. https://doi.org/10.3126/nppr.v1i1.43443

Bhattarai, P. (2021). Purposes and challenges of integrating ICT in English language teaching in Nepalese context. *Utamax: Journal of Ultimate Research and Trends in Education, 3*(3), 198-206. https://doi.org/10.31849/utamax.v3i3.7780

Bingimlas, K.A. (2009) Barriers to the successful integration of ICT in teaching and learning environments: A review of literature. *Eurasia Journal of Mathematics, Science & Technology Education, 5*(3), 235-245. https://doi.org/10.12973/ejmste/75275

Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for Education: An introduction to theories and methods* (3rd ed.). Allyn and Bacon.

Bowman, M. A., Vongkulluksn, V. W., Jiang, Z., & Xie, K. (2022). Teachers' exposure to professional development and the quality of their instructional technology use: The mediating role of teachers' value and ability beliefs. *Journal of Research on Technology in Education, 54*(2), 188–204. https://doi.org/10.1080/15391523.2020.1830895

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bruner, J. S. (1966). *Toward a theory of instruction*. Harvard University Press.

Butler, M., Morgan, M., Sheard, J., Simon, Falkner, K., & Weerasinghe, A. (2015, June). Initiatives to increase engagement in first-year ICT. In *Proceedings of the 2015 ACM conference on innovation and technology in computer science education* (pp. 308-313).

Cardona, M., Kretschmer, T., & Strobel, T. (2013). ICT and productivity: Conclusions from the empirical literature. *Information Economics and Policy*, *25*(3), 109-125. https://doi.org/10.1016/j.infoecopol.2012.12.002

Chapelle, C. A. (2003). *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. John Benjamins Publishing Company. https://doi.org/10.1075/lllt.7

Chapelle, C. A., & Sauro, S. (Eds.). (2017). *The handbook of technology and second language teaching and learning*. Wiley Blackwell. https://doi.org/10.1002/9781118914069

Charisma, D., Winarto, E. R., Raman, A., Sirniawati. & Jahini, I. (2025). Embracing digital tools: Understanding teachers' attitudes on ICT integration in classroom learning. *Journal of Pedagogy and Education Science, 4*(3), 641–659. https://doi.org/10.56741/IISTR.jpes.001015.

Charles-Zalakoro, J. L. (2024). Innovative pedagogies in teaching language education: Blending creativity with technology. In *Faculty of education, Ignatius Ajuru University of education conference proceedings* (Vol.2, pp.151-163). https://foeiaue.ng/publications/2024_CONF_VOL_2/24.pdf

Cheng, H., Wang, Z., Peng, J., Xu, Y., & Yin, W. (2026). The paradox of information and communication technology demands at work on creativity: The moderating effect of job autonomy. *Applied Psychology*, *75*(1), e70067. https://doi.org/10.1111/apps.70067

Chua, C. N., Yunus, M.M., & Suliman, A. (2019). ICT: An effective platform to promote writing skills among Chinese primary school pupils. *Arab World English Journal*, *10*(4), 223-237. https://doi.org/10.24093/awej/vol10no4.17

Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research.* Jossey-Bass Publishers.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Creswell, J. W. (2007). *Qualitative inquiry and research design* (2nd ed.). Sage Publications.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage Publications.

Creswell, J. W., & Báez, J. C. (2021). *30 essential skills for the qualitative researcher* (2nd ed.). SAGE Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Curriculum Development Centre (CDC). (2019). *National curriculum framework for school education in Nepal, 2019*.

Dalton, K. O. (2019). *An evaluation of ICT uses in institutions of higher learning in Burundi: A case study of Bujumbura Province* [Unpublished doctoral dissertation]. Kampala International University. https://ir.kiu.ac.ug/handle/20.500.12306/4844

Das, T. (2013). *Applying techno-pedagogy in the science classroom: A case study of Nepal* [Unpublished master's dissertation]. Kathmandu University. https://repository.ku.edu.np/bitstreams/f2584d2f-6b0f-46a2-9dc4-27e05034570e/download

Davies, R. S., & West, R. E. (2013). Technology integration in schools. In: Spector, J., Merrill, M., Elen, J., Bishop, M. (Eds.), *Handbook of research on educational communications and technology* (4th ed., pp. 841-853). Springer. https://doi.org/10.1007/978-1-4514-3185-5_68

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Demissie, E. B., Labiso, T. O., & Thuo, M. W. (2022). Teachers' digital competencies and technology integration in education: Insights from secondary schools in Wolaita Zone, Ethiopia. *Social Sciences & Humanities Open, 6*(1). https://doi.org/10.1016/j.ssaho.2022.100355

Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4th ed.). SAGE Publication.

Dhital, H. (2018). Opportunities and challenges to use ICT in government school education of Nepal. *International Journal of Innovative Research in Computer*

and Communication Engineering, *6*(4), 3215-3220. https://doi.org/10.15680/IJIRCCR.2018.0604004

Dong, Y., Xu, C., Chai, C. S., & Zhai, X. (2020). Exploring the structural relationship among teachers' technostress, technological pedagogical content knowledge (TPACK), computer self-efficacy and school support. *The Asia-Pacific Education Researcher, 29*(2), 147–157. https://doi.org/10.1007/s40299-019-00461-5

Dudeney, G., & Hockly, N. (2007). *How to teach English with technology*. Pearson Education.

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development, 53*(4), 25–39. https://doi.org/10.1007/BF02504683

Ertmer, P. A., Ottenbereit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education, 59*(2), 423-435. https://doi.org/10.1016/j.compedu.2012.02.001

Ertmer, P. A., Ottenbreit-Leftwich, A. T., & Tondeur, J. (2016). Teacher beliefs and uses of technology to support 21st century teaching and learning. In H. Fives & M. G. Gill (Eds.), *International handbook of research on teachers' beliefs* (2nd ed.). Routledge. https://doi.org/10.4324/9780203108437-33

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication, 32*(4), 365–387. https://doi.org/10.35699/1983-3652.2021.34055

Forcheri, P., & Molfino, M. T. (2000). ICT as a tool for learning to learn. In D. M. Watson & T. Downes (Eds.), *Communications and Networking in Education: Learning in a Networked Society* (pp. 175-184). Springer. https://doi.org/10.1007/978-0-387-35499-6_19

Fraillon, J., Ainley, J., Schulz, W., Friedman, T., & Gebhardt, E. (2014). *Preparing for life in a digital age: The IEA international computer and information literacy study international report*. Springer. https://doi.org/10.1007/978-3-319-14222-7

Ghavifekr, S., Kunjappan, T., Ramasamy, L., & Anthony, A. (2016). Teaching and learning with ICT tools: Issues and challenges from teachers' perceptions.

Malaysian Online Journal of Educational Technology, *4*(2), 38-57. https://doi.org/10.52380/mojet.2016.4.2.81

Gigante, N. A., & Firestone, W. A. (2008). Administrative support and teacher leadership in schools implementing reform. *Journal of Educational Administration*, *46*(3), 302-331. http://dx.doi.org/10.1108/09578230810869266

Goldhammer, F., Gniewosz, G., & Zylka, J. (2016). ICT engagement in learning environments. In S. Kuger, E. Klieme, N. Jude, & D. Kaplan (Eds.), *Assessing contexts of learning: An international perspective* (pp. 331-351). Springer. https://doi.org/10.1007/978-3-319-45357-6_13

González-Laguna, M. V., López, P., Valenzuela, Á., Alves, R., Rodríguez, C., & Fidalgo, R. (2026). Teaching factors influencing ICT use in writing instruction. *Education Sciences, 16*(1), 68. https://doi.org/10.3390/educsci16010068

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. SAGE Publications.

Hakkarainen, K., Muukonen, H., Lipponen, L., Ilomäki, L., Rahikainen, M., & Lehtinen, E. (2001). Teachers' information and communication technology (ICT) skills and practices of using ICT. *Journal of Technology and Teacher Education*, *9*(2), 181-197.

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers, 3*, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004

Halim, H. A., Krishnasami, A., Aziz, Y. H., Sulaiman, N. S., & Kamaluddin, A. (2018). Investigation on Student Accessing Information for ICT-Learning Approaches. *Global Business & Management Research*: *An International Journal, 10*(3), 473-485.

Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Pearson Education.

Hockly, N. (2018). Blended Learning. *ELT Journal, 72*(1), 97–101. https://doi.org/10.1093/elt/ccx058

Huu, P. T. (2023). Impact of employee digital competence on the relationship between digital autonomy and innovative work behavior: A systematic review.

Artificial Intelligence Review, *56*(12), 14193-14222. https://doi.org/10.1007/s10462-023-10492-6

Hyland, K. (2018). Sympathy for the devil? A defense of EAP. *Language Teaching*, *51*(3), 383-399. https://doi.org/10/1017/SO26144481000101

Jimoyiannis, A., & Komis, V. (2007). Examining teachers' beliefs about ICT in education: Implications of a teacher preparation programme. *Teacher Development*, *11*(2), 149-173. https://doi.org/10.1080/13664530701414779

Johnson, R. B., & Christensen, L. (2020). *Educational research: Quantitative, qualitative, and mixed approaches* (7th ed.). SAGE Publications.

Joshi, B. M., & Khatiwada, S. P. (2024). Analyzing barriers to ICT integration in education: A systematic review. *Tribhuvan University Journal, 24*(1). https://doi.org/10.3126/tp.v24il.73325

Joshi, D. R. (2017). Policies, practices and barriers of ICT utilization in school education in Nepal. *International Journal of Research in Social Sciences*, *7*(2), 408-417. https://www.ijmra.us/2017ijrss_february.php

Kalyani, L. K. (2024). The role of technology in education: Enhancing learning outcomes and 21st century skills. *International Journal of Scientific Research in Modern Science and Technology, 3*(4), 5–10. https://doi.org/10.59828/ijsrmst.v3i4.199

Karki, H. (2019). A brief history of public education, information & communication technology (ICT) and ICT in public education in Nepal. *Deerwalk Journal of Computer Science and Information Technology*, *1*, 78-103.

Karunakaran, B., & Aruldhas, N. J. (2021). The contribution of information and communication technology to develop writing skills in ESL classroom. *International Journal of Advanced Research in Science, Communication and Technology, 4*(3), 123–124. https://doi.org/10.48175/IJARSCT-V4-I3-019

Kassim, A., Kassim, H., Nik Mohd Alwi, N.A., Nordin, M. S., & Rahim, M. (2024). A systematic literature review of web-based tools application in ESL and EFL writing classes. *International Journal of Language Education and Applied Linguistics, 14*(1), 40-50. https://doi.org/10.15282/ijleal.v14i1.10259

Keane, T., Keane, W. F., & Blicblau, A. S. (2016). Beyond traditional literacy: Learning and transformative practices using ICT. *Education and Information Technologies*, *21*(4), 769-781. https://doi.org/10.1007/s10639-014-9353-5

Keengwe, J., Onchwari, G., & Wachira, P. (2008). Computer technology integration and student learning: Barriers and promise. *Journal of Science Education and Technology*, *17*(6), 560-565. https://doi.org/10.1007/s10956-008-9123-5

Khadka, B. K., & Shahi, D. K. (2025). English teachers' knowledge of using ICT in English language teaching in Nepal. *American Journal of STEM Education, 4,* 27-46. https://doi.org/10.32674/4v399g47

Khudaverdiyeva, T. (2025). The importance of writing in language acquisition: A cognitive, communicative, and pedagogical perspective. *Global Spectrum of Research and Humanities, 2*(3), 127–138. https://doi.org/10.69760/gsrh.0203025014

Kim, A. (2026). Organizational levers for instructional quality: strengthening ICT agency through autonomy and school leadership. *Education and Information Technologies*, *31*(8), 2269-2291. https://doi.org/10.1007/s10639-025-13892-z

Kinaanath, M. (2013). *The use of information and communication technology in teaching and learning within higher education sector of a small island developing state: The case of the Maldives* [Unpublished doctoral dissertation]. Victoria University of Wellington. https://hdl.handle.net/10063/2977

Kirkwood, A. (2014). Teaching and learning with technology in higher education: blended and distance education needs 'joined-up thinking' rather than technological determinism. *Open Learning: The Journal of Open, Distance and e-Learning*, *29*(3), 206-221. https://doi.org/10.4018/978-1-60960-750-0.cg002

Koch, T., & Harrington, A. (1998). Reconceptualizing rigour: The case for reflexivity. *Journal of Advanced Nursing, 28*(4), 882–890. https://doi.org/10.1046/j.1365-2648.1998.00725.x

Koehler, M. J., Shin, T. S., & Mishra, P. (2011). How do we measure TPACK? Let me count the ways. In R. N. Ronau, C. R. Rakes, & M. L. Niess (Eds), *Educational technology, teacher knowledge, and classroom impact: A research handbook on frameworks and approaches* (pp. 16-31). IGI Global. https://doi.org/10.4018/978-1-60960-750-0.ch002

Kozma, R. B. (2002). The role of ICT in education: A comparative analysis of national policies. *International Journal of Educational Development, 22*(1), 1–13.

Kozma, R. B., & Isaacs, S. (Eds.). (2011). *Transforming education: The power of ICT policies*. UNESCO.

Kraatz, E., Nagpal, M., Lin, T.-J., Hsieh, M.-Y., Ha, S. Y., Kim, S., & Shin, S. (2020). Teacher scaffolding of social and intellectual collaboration in small groups: A comparative case study. *Frontiers in Psychology, 11*. https://doi.org/10.3389/fpsyg.2020.587058

Laudari, S. (2019). *Breaking barriers: Exploring digital practices of teacher educators in Nepal* [Unpublished doctoral dissertation]. University of Technology Sydney. https://opus.lib.uts.edu.au/handle/10453/137075

Lim, C. P., Ra, S., Chin, B., & Wang, T. (2020). Leveraging information and communication technologies (ICT) to enhance education equity, quality, and efficiency: Case studies of Bangladesh and Nepal. *Educational Media International, 57*(2), 87–111. https://doi.org/10.1080/09523987.2020.1786774

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications, Inc.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage Handbook of Qualitative Research*, *4*(2), 97-128). SAGE Publications.

Liu, Y., & Bt Mohd. Yusof, F. (2026). Exploring EFL teachers' beliefs about technology integration: Applying the PBT model in Chinese higher education. *Contemporary Educational Technology, 18*(2), ep655. https://doi.org/10.30935/cedtech/18533

Liu, Y., Thurston, A., & Ye, X. (2024). Technology-enhanced cooperative language learning: A systematic review. *International Journal of Education Research, 124*. https://doi.org/10.1016/j.ijer.2024.102314

Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford Review of Education*, *38*(1), 9-24. https://doi.org/10.1080/03054985.2011.577938

López Henao, J. A. (2017). The influence of ICT in the development of writing skills through an online platform. *Matices en Lenguas Extranjeras, 11*, 19–44. https://doi.org/10.15446/male.n11.71852

Maghfiroh, W., & Muttaqin, A. I. (2025). The relevance of collaborative learning in the perspective of Lev Vygotsky's social constructivism: A literature review. *Journal of Islamic Education Research, 6*(4), 377-392; https://doi.org/10.35719/jier.v6i4.518

Mahenge, M. P. J., & Sanga, C. (2016). ICT for e-learning in three higher education institutions in Tanzania. *Knowledge Management & E-Learning*, *8*(1), 200-212. https://doi.org/10.34105/j.kmel.2016.08.013

Majdoub, M., Heilporn, G., & Diab, F. (2025). Digital technology use in high school classes: Linking types of access and student engagement. *The Open/Technology in Education, Society, and Scholarship Association Journal, 4*(3), 1–18. https://doi.org/10.18357/otessaj.2024.4.3.75

Majumdar, S. (2015). Emerging trends in ICT for education & training. *Director General Asia & Pacific Region IVETA*, 1-13.

Mali, Y.C.G., & Salsbury, T.L. (2022). Technology integration in an Indonesian EFL writing classroom. *TEFLIN Journal, 32*(2), 243-266. https://doi.org/10.15639/http:/teflinjournal.v32i2/243-266

Mdhlalose, D., & Mlambo, G. (2023). Integration of technology in education and its impact on learning and teaching. *Asian Journal of Education and Social Studies, 47*(2), 54–63. https://doi.org/10.9734/AJESS/2023/v47i21021

Mhlanga, D., Mhlanga, F., Moloi, T., & Mupfumira, M. (2024). Integration of information and communication technology in secondary education for better learning: A systematic literature review. *Heliyon, 10*(2), e24012. https://doi.org/10.1016/j.heliyon.2024.e24012.

Ministry of Education, Science and Technology (MoEST). (2022). *School education sector plan, 2022–2032*. https://giwmscdntwo.gov.np/media/pdf_upload/SESP-Nov-2022-1_gvbhzbv.pdf

Mishra, M., Gorakhnath, I., Lata, P., Rani, R., & Chopra, P. (2022). Integration of technological pedagogical content knowledge (TPACK) in classrooms through a teacher's lens. *International Journal of Health Sciences*, *6*(S3), 12505-12512. https://doi.org/10.53730/ijhs.v6nS3.9536

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record, 108*(6), 1017–1054. https://doi.org/10.111/j.1467-9620.2006.00684.x

Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation Biology*, *28*(5), 1167-1177. https://doi.org/10.1111/cobi.12326

Mrosso, V., & Ndibalema, P. (2024*).* Teachers' perceptions on the role and challenges of using ICT in English language classrooms. *International Journal of Technology in Education and Science, 8*(1), 121–137. https://doi.org/10.46328/ijtes.527

Msafiri, M. M., Kangwa, D., & Cai, L. (2023). A systematic literature review of ICT integration in secondary education: What works, what does not, and what next?. *Discover Education*, *2*(1). https://doi.org/10.1007/s44217-023-00070-x

Msambwa, M. M., Daniel, K., & Cai, L. (2024). Integration of information and communication technology in secondary education for better learning: A systematic literature review. *Social Sciences & Humanities Open, 10*. https://doi.org/10.1016/j.ssaho.2024.101203

Murray, D. M. (1972). Teach writing as a process not product. *The Leaflet, 71*(3), 11–14.

Naaz, F. (2025). Enhancing ICT integration: Addressing teachers' perspectives and institutional challenges in schools. *Synergy: International Journal of Multidisciplinary Studies, 2*(1), 61–72. https://doi.org/10.63960/synergyint.j.multidiscip.stud..v2i1.36

Napitupulu, M. H., Muddin, A., Bagiya, B., Diana, S., & Rosyidah, N. S. (2024). Teacher professional development in the digital age: Strategies for integrating technology and pedagogy. *Global International Journal of Innovative Research, 2*(10), 2382–2396. https://doi.org/10.59613/global.v2i10.334

Navas-Bonilla, C. R., Guerra-Arango, J. A., Oviedo-Guado, D. A., & Murillo-Noriega, D. E. (2025). Inclusive education through technology: A systematic review of types, tools and characteristics. *Frontiers in Education, 10*. https://doi.org/10.3389/feduc.2025.1527851

Nguyen, H. T. M. (2019). *Developing research competence for international master's students through a writing group: A participatory action research study* [Unpublished doctoral dissertation]. The University of Waikato.

Niess, M. L. (2005). Preparing teachers to teach science and mathematics with technology: Developing a technology pedagogical content knowledge. *Teaching and Teacher Education*, *21*(5), 509-523. http://doi.org/10.1016/j.tate.2005.03.006

Niroula, N.P. (2023). *Experience of ICT use in pedagogy by English teacher: A phenomenological study* [Unpublished MPhil dissertation]. Kathmandu University. https://hdl.handle.net/20.500.14301/363

Nutt, J. (2010). *Professional educators and the evolving role of ICT in schools: Perspective report*. CfBT Education Trust. https://www.edt.org/insights-from-our-work/professional-educators-and-the-evolving-role-of-ict-in-schools/

Oliver, R. (2002). *The role of ICT in higher education for the 21st century: ICT as a change agent for education* [Conference paper]. International Conference on Higher Education for the 21st Century, Miri, Sarawak, Malaysia.

Pardede, P. (2024). The strands and findings of recent research on technology-enhanced collaborative writing in EFL setting: A systematic review. *Journal of English Teaching, 10*(2), 170-182. https://doi.org/10.33541/jet.v10i2.6035

Patel, C. (2013). Use of multimedia technology in teaching and learning communication skill: An analysis. *International Journal of Advancements in Research & Technology, 2*(7), 116–123.

Player-Koro, C. (2012). Factors influencing teachers' use of ICT in education. *Education Inquiry*, *3*(1), 93-108. https://doi.org/10.3402/edui.v3i1.22015

Pokharel, S. (2019). *Students' perceptions on the use of ICT in developing English language writing skills* [Unpublished master's thesis]. Tribhuvan University. https://elibrary.tucl.edu.np/items/1f2bd577-e3e0-47d7-8c91-3e0652e2b263

Pozo, J. I., Pérez Echeverría, M. -P., Cabellos, B., & Sánchez, D. L. (2021). Teaching and learning in times of COVID-19: Uses of digital technologies during school lockdowns. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.656776

Pun, M. (2013). The use of multimedia technology in English language teaching: A global perspective. *Crossing the Border: International Journal of Interdisciplinary Studies, 1*(1), 29–38.

Qasem, A. A., & Viswanathappa, G. (2016). The teachers' perception towards ICT integration: Professional development through blended learning. *Journal of Information Technology Education: Research, 15*, 561–575. https://doi.org/10.28945/3562

Rahiem, M. D. H. (2020). Technological barriers and challenges in the use of ICT during the COVID-19 emergency remote learning. *Universal Journal of Educational Research*, *8*(11B), 6124-6133. https://doi.org/10.13189/ujer.2020.082248

Rai, A. (2024, September 1). Alpha's pictographs and emoticons: Student's sovereignty – My signature pedagogy. *NELTA ELT Forum.* https://neltaeltforum.wordpress.com/2024/09/01/alphas-pictographs-and-emoticons-students-sovereignty-my-signature-pedagogy/

Rajendra, M., & Kaur, B. (2023). Impact of technology on education. *ResearchGate,* https://www.researchgate.net/publication/368637034_Impact_of_Technology_on_Education.

Ramachandran, V. (2021). Standard researches identify four causes for 'Zoom fatigue' and their simple fixes. *Journal of Applied Psychology, 106*(5), 789–797. https://news.stanford.edu/stories/2021/02/four-causes-zoom-fatigue-solutions

Ramanathan, H. N., Kurian, S., & Šostar, M. (2024). Bridging the gap: ICTs building innovative pathways for inclusive special education. *Journal of Infrastructure, Policy and Development, 8*(15). https://doi.org/10.24294/jipd10215

Rana, K. (2018). *ICT in rural primary schools in Nepal: Context and teachers' experiences* [Unpublished doctoral dissertation]. University of Canterbury.

Rana, K. (2020). ICT integration in teaching and learning activities in higher education: A case study of Nepal's teacher education. *Malaysian Online Journal of Educational Technology, 8*(1), 1–15. https://doi.org/10.17220/mojet.2020.01.003

Rana, K., Greenwood, J., Fox-Turnbull, W., & Wise, S. (2018). A shift from traditional pedagogy in Nepali rural primary schools? Rural teachers' capacity

to reflect ICT policy in their practice. *International Journal of Education and Development using Technology*, *14*(3). 149-166.

Rao, M. S., & Ramana, V. S. V. L. (2022). Integration of technology into pedagogical practices. *International Journal of Linguistics and Literature, 11*(1), 27-32.

Rashid, M. H., Lan, Y., & Hui, W. (2022). The perspectives of English teachers towards writing education, as well as the obstacles they encounter. *International Journal of Applied Linguistics & English Literature, 11(1),* 54-58. https://doi.org/10.7575/aiac.ijalel.v.11n.1p.54

Rastogi, A., & Malhotra, S. (2013). ICT skills and attitude as determinants of ICT pedagogy integration. *European Academic Research*, *1*(3), 301-318. https://euacademic.org/UploadArticle/22.pdf

Raygan, A., & Moradkhani, S. (2022). Factors influencing technology integration in an EFL context: Investigating EFL teachers' attitudes, TPACK level, and educational climate. *Computer Assisted Language learning, 35(8),* 1789-1810. https://doi.org/10.1080/09588221.2020.1839106

Regan, K., Evmenova, A. S., Sacco, D., Schwartzer, J., Chirinos, D. S., & Hughes, M. D. (2019). Teacher perceptions of integrating technology in writing. *Technology, Pedagogy and Education, 28*(1), 1–19. https://doi.org/10.1080/1475939X.2018.1561507

Richards, K. (2003). *Qualitative inquiry in TESOL*. Palgrave Macmillan. https://doi.org/10.1057/9780230505056

Roopa, S., & Kanna, M. R. (2024). Revolutionizing learning: The role of ICT in enhancing student engagement and achievement. *Library of Progress-Library Science, Information Technology & Computer*, *44*(3). https://doi.org/10.48165/bapas.2024.44.2.1

Roztocki, N., Soja, P., & Weistroffer, H. R. (2019). The role of information and communication technologies in socioeconomic development: Towards a multi-dimensional framework. *Information Technology for Development, 25*(2), 171–183. https://doi.org/10.1080/02681102.2019.1596654.

Sah, A., Rai, A., Tiwari, Y., & Koirala, P. P. (2025). Technology in optimizing English language learners' classroom engagement: A narrative inquiry. *Rajarshi Janak University Research Journal, 3*(2), 59–70. https://doi.org/10.3126/rjurj.v3i2.88025

Salehi, H., & Salehi, Z. (2012). Challenges for using ICT in education: teachers' insights. *International Journal of e-Education, e-Business, e-Management and e-Learning*, *2*(1), 40-47. https://doi.org/10.7763/IJEEEE.2012.V2.78

Sánchez, A. B., Marcos, J. J. M., González, M. A., & GuanLin, H. (2012). In service teachers' attitudes towards the use of ICT in the classroom. *Procedia-Social and Behavioral Sciences*, *46*, 1358-1364. https://doi.org/10.1016/j.sbspro.2012.05.302

Sarkar, S. (2012). The role of information and communication technology (ICT) in higher education for the 21st century. *The Science Probe, 1*(1), 30–40.

Saud, D. S., & Laudari, S. (2023). English language teachers' experiences of using ICT in ELT. *Journal of NELTA, 28*(1), 151–165. https://doi.org/10.3126/nelta.v28i1.61800

Schmidt, C. (2004). The analysis of semi-structured interviews. In U. Flick, E. von Kardorff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 253–258). SAGE Publications

Schmitz, M.-L., Antonietti, C., Cattaneo, A., Gonon, P., & Petko, D. (2022). When barriers are not an issue: Tracing the relationship between hindering factors and technology use in secondary schools across Europe. *Computers & Education, 179*. https://doi.org/10.1016/j.compedu.2021.104411

Scott, D., & Usher, R. (2011). *Researching education: data, methods and theory in educational enquiry*. Continuum International Pub.

Shah, S. S. (2022). Teaching and learning with technology: Effectiveness of ICT integration in schools. *Indonesian Journal of Educational Research and Technology, 2*(2), 133–140. https://doi.org/10.17509/ijert.v2i2.43554

Sharma, G. (2022). Teachers' perceptions on the use of ICT tools in ELT [Unpublished master's thesis]. Tribhuvan University. https://hdl.handle.net/20.500.14540/17087

Shields, R. (2011). ICT or I see tea? Modernity, technology and education in Nepal. *Globalisation, Societies and Education, 9*(1), 85–97. https://doi.org/10.1080/14767724.2010.513536

Silviyanti, T. M., & Yusuf, Y. Q. (2015). EFL Teachers' Perceptions on Using ICT in Their Teaching: To Use or to Reject?. *Teaching English with Technology*, *15*(4), 29-43.

Sowell, J. (2022). Digital multimodal composition in the second-language classroom. *English Teaching Forum, 60*(1), 15–25. https://americanenglish.state.gov/files/ae/resource_files/60_1_pg15-25_sowell.pdf

Storch, N. (2013). *Collaborative writing in L2 classrooms: New perspectives on language & education* (Vol. 31). Multilingual Matters. https://doi.org/10.21832/9781847699954

Suárez-Rodríguez, J., Almerich, G., Orellana, N., & Díaz-García, I. (2018). A basic model of integration of ICT by teachers: Competence and use. *Educational Technology Research and Development*, *66*(5), 1165-1187. http://dx.doi.org/10.1007/s11423-018-9591-0

Tadesse, S., & Muluye, W. (2020). The impact of COVID-19 pandemic on education system in developing countries: A review. *Open Journal of Social Sciences*, *8*(10), 159-170. https://doi.org/10.4236/jss.2020.810011

Taylor, P. C., & Medina, M. N. D. (2013). Educational research paradigms: From positivism to multiparadigmatic. *Journal for Meaning Centered Education*, *1*(2). https://www.hetl.org/educational-research-paradigms-from-positivism-to-multipradigmatic

Thapa, B. (2024). *Shifts from chalk-and-talk to ICT-integrated English language classrooms: A narrative inquiry* [Unpublished MPhil dissertation]. Kathmandu University. https://hdl.handle.net/20.500.14301/529

Thapaliya, M.P. (2014). English teachers' perceptions and practices of information and communication technologies (ICTs) in Kathmandu District, Nepal. *International Journal of Academic Research in Education and Review, 2*(10), 251-258. https://doi.org/10.14662/IJARER2014.056

Tkachuk, V., Yechkalo, Y., Semerikov, S., Kislova, M., & Hladyr, Y. (2020, October). Using mobile ICT for online learning during covid-19 lockdown. In *International conference on information and communication technologies in education, research, and industrial applications* (pp. 46-67). Springer International Publishing.

Tondeur, J., Forkosh-Baruch, A., Prestridge, S., Albion, P., & Edirisinghe, S. (2016). Responding to challenges in teacher professional development for ICT integration in education. *Educational Technology and Society*, *19*(3), 110-120.

Tondeur, J., van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: A systematic review of qualitative evidence. *Educational Technology Research and Development, 65*(3), 555–575. https://doi.org/10.1007/s11423-016-9481-2

Torres, M. E., Piraquive, J. O., & Chiappe, A. (2023). School engagement and ICT: A systematic review. *Profesorado, Revista de Currículum y Formación del Profesorado, 27*(1), 471–501. https://doi.org/10.30827//professorado.v27il.24050

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, *16*(10), 837-851. https://do.org/10.1177/1077800410383121

Tracy, S. J. (2020). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact* (2nd ed.). Wiley-Blackwell.

U.S. Congress, Office of Technology Assessment. (1988). *Power on! New tools for teaching and learning*. U.S. Government Printing Office.

U.S. Congress, Office of Technology Assessment. (1989). *Linking for learning: A new course for education*. U.S. Government Printing Office.

U.S. Congress, Office of Technology Assessment. (1995). *Teachers and technology: Making the connection*. U.S. Government Printing Office.

U.S. Department of Education. (2010). *Transforming American education: Learning powered by technology: National education technology plan 2010*. https://www.ed.gov/sites/ed/files/netp2010.pdf

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2023). *Global education monitoring report 2023: Technology in education: A tool on whose terms?* https://doi.org/10.54676/UZQV8501

Veddayana, C., Suyitno, I., Widyartono, D., & Aldresti, F. (2025). Systematic review: How technology supports collaborative writing learning in higher education. *Electronic Journal of e-Learning*, *23*(3), 64-78. https://doi.org/10.34190/ejel.23.3.3974

Vicentini, C., & de Oliveira, L. C. (2018). Using technology tools in writing instruction. *NYS TESOL Journal, 5*(2), 44–50. https://journal.nystesol.org/index.php/NYST/article/view/89

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

Walsh, K. (2010). The importance of writing skills: Online tools to encourage success. *Classroom 2.0.* https://www.classroom20.com/profiles/blogs/the-importance-of-writing

Wang, A. Y. (2022) Understanding levels of technology integration: A TPACK scale for EFL teachers to promote 21st -century learning. *Education and Information Technologies, 27*(7)*,* 9935-9952. https://doi.org/10.1007/s10639-022-11033-4

Warschauer, M., & Ware, P. (2006). Learning, change, and power: Competing discourses of technology and literacy. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (pp. 691–707). Springer.

Willis, J. W. (2007). *Foundations of qualitative research: Interpretive and critical approaches*. SAGE Publications.

Yadav, P. K. (2011). Blogging as a means of professional development for ELT professionals. *Journal of NELTA*, *16*(2), 123–132. https://doi.org/10.3126/nelta.v16i1-2.6136

Yang, S. C., & Huang, Y.-F. (2008). A study of high school English teachers' behavior, concerns and beliefs in integrating information technology into English instruction. *Computers in Human Behavior,* 24(3), 1085-1103. https://doi.org/10.1016/j.chb.2007.03.009

Yunus, M. M., Nordin, N., Salehi, H., Embi, M. A., & Salehi, Z. (2013). The use of information and communication technology (ICT) in teaching ESL writing skills. *English Language Teaching*, *6*(7), 1-8. https://doi.org/10.5539/elt.v6n7p1

Yunus, M. M., Zakaria, S., & Suliman, A. (2019). The potential use of social media on Malaysian primary students to improve writing. *International Journal of Education and Practice*, *7*(4), 450-458. https://doi.org/10.18488/journal.61.2019.74.450.458

Zhang, R., & Zou, D. (2022). Types, features, and effectiveness of technologies in collaborative writing for second language learning. *Computer Assisted Language Learning, 35*(9), 2391–2422. https://doi.org/10.1080/09588221.2021.1880441

Zweekhorst, M. B. M., & Maas, J. (2015). ICT in higher education: Students perceive increased engagement. *Journal of Applied Research in Higher Education*, *7*(1), 2-18. https://doi.org/10.1108/JARHE-02-2014-0022

APPENDIX

Interview Questions

I am Manju Basnet pursuing MPhil Degree in Kathmandu University, School of Education. I am conducting this research on *"Experiences of secondary level English teachers on integrating ICT into writing"*. These interview guidelines have been prepared to complete the very research. The entire process of the research is being done under the supervisions of Prof. Dr. Tikaram Poudel, Head of English Department and Assistant Prof. Dr. Siddhartha Dhungana of Kathmandu University, School of Education. This is a qualitative research study and tries to excavate the Secondary-level English language teachers' understanding and experiences of ICT integration into teaching writing skills. Your experiences and insights are very valuable in this study. I hope for your kind co-operation and contribution. I assure your responses will be kept confidential and used only for academic purposes. if you feel uncomfortable, you can skip any question or stop the interview.

Section: I (Personal Information)

Good morning! how are you? Can you please give your brief introduction? (Including your name, address

1. May I get your number?
2. How long you are here in this school?
3. Do you have your email address? How often do you use it?
4. Do you use computer?
5. Can you tell, what do you know about technology?
6. What technological tool do you know?
7. Do you use them in the class?
8. Do you have internet at home and school?

Section: II (Information related to Teachers' perception and experiences of ICT and its integration into writing instruction)

Could you briefly describe your teaching journey and experience as an English teacher?

1. Do you remember when your school started using ICT?
2. How do you feel about using ICT in your classroom activities?
3. Why do you think your school started using ICT?

4. Have you received any training related to ICT or teaching writing skills? If yes, please share.
5. How do you see the integration of ICT in pedagogical activities?
6. What does ICT integration in teaching writing skills mean to you?
7. Can you share any changes in your perception about using ICT over the years?
8. Any writing activities do you think are most supported by ICT tools in your classroom?
9. How do you feel in using ICT in teaching writing, any incident or any activity? Can you describe a typical lesson where you use ICT to teach writing?
10. Do you use any particular technological tools in your writing instructions? Does it help?
11. Have you ever experienced any successful/unpleasant moment during ICT use in your classroom practices?
12. What kind of support or training would help you use ICT more effectively in writing classes?
13. Do you collaborate with colleagues or attend workshops to improve your ICT practices?
14. Do you feel supported/demotivated using ICT tools in your classroom activities? etc.