# TEACHERS' PERCEPTIONS AND PRACTICES OF FLIPPED LEARNING IN SECONDARY SCHOOLS OF NEPAL: A NARRATIVE INQUIRY

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### AN ABSTRACT

of the dissertation of *Laxmi Sharma* for the degree of Master of Philosophy in Educational Leadership, presented on 29 November 2024, entitled Teachers' Perceptions and Practices of Flipped Learning in Secondary Schools of Nepal: A Narrative Inquiry.

#### APPROVED BY

# Asst. Prof. Rebat Kumar Dhakal, PhD Dissertation Supervisor

This research investigates the perceptions and practices of secondary-level teachers regarding flipped learning, specifically focusing on how these educators narrate their experiences within this learning model. To achieve this, the study addresses how secondary-level teachers describe their perceptions and practices of flipped learning. The research draws on thick and rich descriptions by employing qualitative methods (Lincoln & Guba, 1985) to capture the teachers' experiences in the Nepalese educational context. It aims to explore how flipped learning influences students' motivation, performance, engagement, and learning outcomes.

The study involved purposeful sampling of four secondary-level teachers from Pokhara and Kathmandu, who were recognized for their professionalism, innovation, and commitment to continuous learning. The researcher conducted multiple in-depth interviews, classroom observations, and post-observation interviews while reflecting on personal teaching experiences. The connectivism and social constructivism framework underpins the study, highlighting the importance of interaction and engagement in flipped learning environments.

Findings reveal that teachers view flipped learning as effective as it enhances student engagement and fosters essential 21st-century skills, including creativity, communication, and collaboration. Teachers perceive that flipped classrooms engage students more and enhance their technological skills. Nevertheless, they face implementation challenges, such as addressing student capabilities, needing greater administrative and parental support, and managing time constraints. Teachers acknowledge that flipped learning promotes self-directed learning, allowing students to learn at their own pace. The research shows a transformation in teachers' roles from traditional instructors to facilitators of learning. Though implementation remains challenging, educators express positivity and support for flipped learning, emphasizing their potential to foster multiple intelligences and enhance parental involvement in education. These insights could inform educational policy and contribute to the planning of innovative teaching practices.

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29 November 2024

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शोध सार

शैक्षिक नेतृत्व तथा व्यवस्थापनमा दर्शनशास्त्रको स्नातकोत्तर डिग्रीको लागि लक्ष्मी शर्माको शोध प्रबन्धको शीर्षक "फ्लिप गरिएको सिकाइका धारणा र अभ्यासहरूमा नेपालका माध्यमिक तहका शिक्षकहरूको एक संकथन" १४ मङ्सिर २०८१ मा प्रस्तुत गरिएको थियो।

> उपप्राध्यापक, रेवत कुमार ढकाल, पिएचडी शोध निर्देशक

यस अनुसन्धानले फ्लिप गरिएको सिकाइको सम्बन्धमा माध्यमिक तहका शिक्षकहरूको धारणा र अभ्यासहरूको अनुसन्धान गर्दछ । विशेष गरी अध्ययनले शिक्षकहरूले यो सिकाइ मोडेल भित्र आफ्ना अनुभवहरू कसरी वर्णन गर्दछन भन्नेमा केन्द्रित छ। यस अध्ययनको उद्देश्य माध्यमिक तहका शिक्षकहरूले फ्लिप गरिएको सिकाइको धारणा र अभ्यासहरू कसरी वर्णन गर्छन्? भन्ने रहेको छ । गुणात्मक विधिहरू मार्फत अनुसन्धानले नेपाली शैक्षिक सन्दर्भमा शिक्षकहरूको अनुभवहरू खिन्नको लागि उनीहरुका "गहिरा र सम्बृद्ध विवरणहरू" (लिङ्कल र गुबा, १९८५) मा आधारित भएर गरेको छ । यसले विद्यार्थीहरूको उत्प्रेरणा, कार्यसम्पादन, संलग्नता र सिकाउने नतिजाहरूलाई कसरी फ्लिप गरिएको सिकाइले प्रभाव पार्छ भन्ने कुरालाई जोड दिएको छ । यस अध्ययनले आफ्नो अनुसन्धान पूरा गर्नका लागि पोखरा र काठमाडौंका चार माध्यमिक तहका शिक्षकहरूको अनुभवलाई समावेश गरेको थियो, जो उनीहरूको पेशागत, नवीनता र निरन्तर सिकाइप्रति प्रतिबद्धताका लागि परिचित थिए। शोधकर्ताले व्यक्तिगत शिक्षण अनुभवहरू प्रतिबिम्बित गर्दा धेरै गहन अन्तरबार्ता , कक्षाकोठाको अवलोकनहरू, र उत्तर अवलोकन अन्तर्वार्ताहरू सञ्चालन गरेका थिए । कनेक्टिभिज्म र सामाजिक निर्माणवादको ढाँचाले अध्ययनलाई निर्देशित गर्दछ र फ्लिप गरिएको सिकाइ वातावरणमा अन्तरक्रिया र संलग्नताको महत्त्वलाई जोड दिएको छ ।

अनुसन्धानबाट शिक्षकहरूले फ्लिप गरिएको सिकाइले प्रभावकारी रूपमा लिएका छन् किनकि यसले विद्यार्थीहरूको संलग्नता बढवा दिएको र रचनात्मकता, सञ्चार, र सहकार्य लगायत एक्काइसौ शताब्दीका आवश्यक सीपहरूलाई बढावा दिनमा सहयोग पुगेको उनीहरुले पाएका छन् । शिक्षकहरूले फ्लिप गरिएको शिक्षण अथवा कक्षाकोठाले विद्यार्थीहरूलाई पढाईमा थप संलग्न गराउँछन् र तिनीहरूको प्राविधिक सीपहरू बढाउँछन् भन्ने बुझएको कुरा उल्लेख गरे । उनीहरूले फ्लिप शिक्षण कार्यान्वयनमा गर्दा धेरै चुनौतीहरूको सामना गरेका छन् | विद्यार्थीको हरेक क्षमताहरूलाई सम्बोधन गर्न , थप प्रशासनिक र अभिभावकीय सहयोगको आवश्यकता, र समयको व्यवस्थापन गर्ने जस्ता केही कठिनाइहरुको सामना गर्नु परेको उनीहरुको अनुभव छ।

शिक्षकहरूले फ्लिप गरिएको सिकाइले आत्म-निर्देशित सिकाइलाई बढावा दिन्छ र विद्यार्थीहरूलाई आफ्नै गतिमा सिक्न अनुमति दिन्छ भन्ने कुरा लाई सकारात्मक तरिकाले स्वीकार गरेका छन् । अनुसन्धानले शिक्षकहरूको भूमिका परम्परागत प्रशिक्षकबाट सिकाइको सहजकर्तामा भएको परिवर्तन भएको देखाउँछ। यद्यपि कार्यान्वयन चुनौतीपूर्ण रहन्छ | शिक्षकहरूले फ्लिप गरिएको सिकाइले धेरै बुद्धिमत्ताहरूलाई बढावा दिन र शिक्षामा अभिभावकहरूको संलग्नता बढाउने सम्भावनालाई जोडदिन सहयोग पुग्ने भएकाले फ्लिप गरिएको सिकाईको सकारात्मक तबरले समर्थन व्यक्त गर्छन्| । शिक्षकहरूका यी अन्तर्दष्टिहरूले शैक्षिक नीतिलाई सूचित गर्न र नवीन शिक्षण अभ्यासहरूको योजना बनाउन योगदान दिन सहयोग पुग्ने देखिन्छ

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लक्ष्मी शर्मा उपाधि उम्मेदवार १४ मङ्सिर २०८१

This dissertation entitled Teachers' Perception and Practices on Flipped Learning in Secondary Schools of Nepal: A Narrative Inquiry presented by Laxmi Sharma on 29 November 2024.

## APPROVED BY

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I understand that 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.

Laxmi Sharma Degree Candidate 29 November 2024

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## DECLARATION

I hereby make the declaration that this dissertation has not been submitted for the candidature of any other degree to any University.

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Laxmi Sharma Degree Candidate 29 November 2024

## DEDICATION

This work is solely dedicated to my family and all the dynamic Teachers teaching at the secondary level (9-12) in Nepal.

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## ABBREVIATIONS

AR	Augmented Reality
AV	Audio Visual
BA	Bachelor of Arts
BEC	Basic Education Curriculum
EFA	Education for All
ESP	Education Sector Plan
F2F	Face to Face
FLN	Flipped Learning Network
GON	Government of Nepal
ICT	Information Communication Technology
ICTMP	Information Communication and Technology Monitoring Policy
ID	Information Details
IED	Inter Mediate Degree
LMS	Learning Management System
MA VI	Madhyamika Vidyalaya
MA	Master of Arts
MBBS	Bachelor of Medicine and Bachelor of Surgery
MED	Master of Education
MOEST	Ministry of Education Science and Technology
MOOC	Massive Open Online Courses
MOOC	Massive Open Online Course
MPHIL	Master of Philosophy
MSC	Master of Science
NCF	National Curriculum Framework
NEP	National Education Plan
NPA	National Plan of Action
OLFOC	One Laptop project for Child
PBL	Project-Based Learning
PBT	Problem-Based Teaching
PCL	Provisional Certificate Level
PNC	Prithvi Narayan Campus

RELO	Regional Education Language Office
SDG	Sustainable Development Goals
SESP	School Education Sector Plan
SLC	School Leaving Certificate
SSDP	School Sector Development
SSRP	School Sector Reform Plan
SSRP	School Sector Reform Program
STEAM	Science, Technology, Engineering and Mathematics
TCF	Teachers Competency Framework
TPC	Teachers Professional Competency
TPD	Teachers' Professional Development
TPDF	Teachers' Professional Development Framework
TU	Tribhuvan University
UK	United Kingdom
URL	Uniform Resource Locator
US	United States of America
VR	Virtual Reality

## LIST OF FIGURES

Figure 1 Map of Nepal Showing the School's Location	4
Figure 2 Connectivism	27
Figure 3 Teachers' Perception and Practices on Flipped Classroom	46
Figure 4 Figurative Expression of Themes on Teachers Perception on Flipped	
Learning	.102
Figure 5 Themes Based on Practices of Flipped Learning	.126

## LIST OF TABLES

Table 1 Participants' Details	55
Table 2 My Field Engagement History	

## TABLE OF CONTENTS

ACKNOWLEDGMENTS i
ABBREVIATIONS iii
LIST OF FIGURESv
LIST OF TABLES vi
TABLE OF CONTENTS vii
CHAPTER I1
INTRODUCTION1
Genesis of Research Agenda3
Historical Foundation of Flipped Learning7
The International Context of Flipped Learning8
Flipped Learning in Nepal: A Short Overview11
Flipped Learning and its Approaches12
Seamless Flipped Learning Model13
Flip2 Learn Flipped Learning Model13
Co-regulation and Co-creation Model14
Exploration of the Essence of Flipped Learning on Student Learning14
Students' Achievement14
Learners' Engagement15
Motivation15
Interaction16
Statement of the Problem16
Purpose of the Study19
Research Question
The Rationale of the Study19
Delimitations of the Study21
Organization of the Study21
CHAPTER II
REVIEW OF RELATED LITERATURE
Connectivism as a Theoretical Framework
Connectivism and its Effectiveness in Learning: A Critical Review24

The Rationale for Choosing Connectivism as a Theoretical Lens in Flipped
Learning
Digital Technology in Creating Flipped Learning
Flipped Learning and Different Technologies
The Evolvement of the Term-Flipped Learning
Formal Learning in an Online Learning Environment
Online learning in Nepal: Challenges and opportunities
Self-Paced Informal Learning
Latest Trends and Innovation in Self-Paced Online Informal Learning35
Self-Paced Informal Learning in Nepal
An Overview of Empirical Review of the Flipped Learning37
Flipped Learning and Constructivist Theory
Teachers' Perceptions of Flipped Learning as a Pedagogy41
Flipped Learning in the Policy Context of Nepal42
School Education Sector Plan43
Research Gap44
Conceptual Framework of My Research46
Chapter Summary47
CHAPTER III
RESEARCH METHODOLOGY48
Philosophical Foundation of Research48
Ontology
Epistemology49
Axiology
Interpretivism as My Research Paradigm50
Narrative Inquiry as a Research Design51
Selection of Research Site and Participants53
Data Collection Procedures56
Fieldwork57
In-Depth Interview57
Observation
Data Analysis and Interpretation
Quality Standards60
Temporality60

Sociality	61
Place	61
Trustworthiness	61
Credibility	61
Transferability	62
Conformability	63
Dependability	63
Verisimilitude	63
Meaningfulness	63
Ethical Considerations	64
Chapter Summary	65
CHAPTER IV	67
PARTICIPANTS DETAILED STORIES ON PERCEPTIONS AND	
PRACTICES OF FLIPPED LEARNING IN NEPAL	67
Participants' Narratives and Positions	67
Shalin's Story	67
His Schooling Experience	68
Higher Study in a Blink	69
His Initial Days of Teaching	70
Turning Point Regarding the Flipped Learning	70
Raju's Story	77
Schooling Experience	
His Higher Study in a blink	79
Turning Point of Adaptation of Flipped Learning	81
Sam's Story	85
Schooling Experience	86
His Initial Days of Teaching	
His Turning Point Regarding Flipped Learning	
Medhavi's Story	92
Her Schooling Experience	93
Her Initial Days of Teaching	94
Turning Point Regarding Flipped Learning	95
Chapter Summary	
CHAPTER V	

LEARNING	101
Teachers' Perspectives on the Effectiveness of Flipped Learning	102
Increased Accountability	102
Engagement	105
Digital literacy	107
Individual /Independent Learning Skills	109
Advancing Educational Agenda: Creating Space for Twenty-First Cen	tury
Skills	110
Communication	111
Creativity	112
Cooperation	113
Implementation Challenges from the Teacher's Lens	115
Student- Cantered Challenges	115
Teacher-Centric Challenges	116
Challenges Related to Parental Support	118
Workplace Challenges	119
Moving Towards Digitalization	121
Personalized Learning	121
Efficient Use of Digital Resources	123
Chapter Summary	125
CHAPTER VI	126
TEACHERS EXPERIENCES ON PRACTICE OF FLIPPED LEARNIN	JG126
Active Learning Tool	127
Self-Directed Learning Tool for Students and Teachers	130
Students' Self-Paced Learning	131
Self-Directed Professional Development of Teachers	133
Teachers' New Identity as a Facilitator	134
Diverse Practices	136
Chapter Summary	141
CHAPTER VII	142
KNOWLEDGE CLAIMS CONCLUSION AND FINAL REFLECTION	142
Challenges the Present Context of Nepal	142
Discussion Model	142

## PARTICIPANTS' STORIES ON THE PERCEPTIONS OF FLIPPED

Promotion of Multiple Intelligence	143
Challenge to the Concept of Schooling	143
Teachers' Professional Identity Creation	143
Advancing Technologically	143
A Support to the Policy Context	144
A Uniformly Approved Pedagogy in the Context of E-Learning	144
A Learning Tool for Teachers and Students	145
Self-Regulated Learning	146
Innovative Pedagogy and Personal Self-Satisfaction	146
Conclusion	146
Implications	148
Final Reflections	149
REFERENCES	151
APPENDIX 1	174
MY REFLECTIONS ON SCHOOL VISIT	174

## CHAPTER I INTRODUCTION

The rapid advancements in science and technology have significantly pointed to the essentiality of technology in people's lives, with a particular focus on their crucial role in reshaping educational settings, mainly in schools. Consequently, the effective integration of Information and Communication Technology (ICT) in teaching-learning activities in schools has become a major concern and the adaptation of flipped classrooms is increasing.

Flipped learning is an innovative and increasingly popular teaching model. In this approach, activities traditionally performed in the classroom, such as content presentation, are shifted to the home, while tasks typically assigned as homework are conducted in class (Bergmann & Sams, 2012; Sohrabi & Iraj, 2016). Within this model, teachers found that supporting students rather than simply dispensing information encourages learners to take charge of their educational journey and regulate their learning pace (Lai & Hwang, 2016).

Flipped learning has gained scholarly attention because it includes improved technologies like virtual realities and instructional videos (Davies et al., 2013). Hence, research on flipped learning has increased in recent years because of its effectiveness in making student-centered teaching (Lo & Hew, 2017). The flipped classroom is known for its application in turning the usual classroom on its side. Its application is rising as it helps students to learn by going beyond the traditional lectures of teachers (Yildiz Durak, 2022). Hence, research on the flipped classroom has increased in recent years (Lo & Hew, 2017). Flipped learning has been used widely because of its usefulness in promoting student engagement and has now become a buzzword worldwide in the changing shifts in the education field.

This research explored secondary school teachers' perceptions and practices of flipped learning. It sought to answer the question: How do secondary school teachers narrate their experiences with flipped learning? Using qualitative domain and narrative inquiry as a research method, the study examined the teachers' perceptions and practices of flipped learning, focusing on student motivation, performance, engagement, and learning outcomes in the Nepali context. This is carried out to know the present practices of teachers as the changing educational shifts require teachers to adopt innovative teaching practices.

The significance of researching teachers' perceptions and practices of flipped learning in Nepal is to enhance teacher training programs. Educational institutions can design targeted professional development initiatives by knowing how educators perceive this teaching model and the specific practices they employ. These initiatives can be useful in addressing the identified gaps in knowledge and practical implementation, thus empowering teachers with the tools and confidence needed to utilize the flipped learning approach effectively. This, in turn, can lead to improved teaching strategies and learning outcomes for students in Nepal. This further can be useful in making timely educational policies.

The study involved a purposeful sampling of four teachers from Pokhara and Kathmandu known for their professionalism and commitment to innovation and hightech schools context. Data were collected through multiple interviews, classroom observations, and post-observation discussions, underpinned by connectivism and social constructivism theories. Teachers shared their experiences, discussing the application, support, challenges, and benefits of flipped classrooms. Findings indicated that teachers view flipped learning as effective for increasing student engagement and responsibility, fostering creativity, cooperation, and 21st-century skills. Flipped learning also enhanced teachers' technological skills, promoting selfdirected learning and transforming their roles from instructors to facilitators.

Despite these benefits, challenges include understanding student needs, managing colleagues' and parental expectations, and dealing with time constraints and insufficient training. Teachers recommended flipped classrooms as conducive to active learning but acknowledged implementation challenges. They strongly advocate for its integration into educational policies to encourage innovation and support diverse learning opportunities for both students and teachers.

This chapter showcases an overall discussion of the journey aiming to explore the practice and perceptions of teachers on flipped learning in secondary schools in Nepal. I begin with the background of my objectives to provide a ladder to my research purpose and statement. I also sketched the historical foundation of flipped learning to keep connected to the topic and concluded by giving the context of flipped learning in Nepal and models of flipped classrooms/learning. Further, I comprehensively explore the statement of the problem. Additionally, I delineate the research purpose, rationale scope, and boundaries of my research within which the research garlands. Finally, I briefly present the organization of my study.

### **Genesis of Research Agenda**

In 2009, after completing my graduation, I decided to pursue a career as a teacher and applied for a position in one of Pokhara's schools. I was chosen to teach English at the secondary level. Everything was new to me as a new teacher. There was an excellent audio-visual (AV) room in the school. It astounded me because I had no idea such resources existed in schools, at least in Pokhara. Students at that school used to go to the room once a week, and teachers were expected to schedule it around their schedules. I had the opportunity to take my pupils there one day and learned a lot from them as they were given films, audio samples, and stories. Then, I realized that the area was supposed to supply pupils with digital learning materials, a brand-new technique. It meant a lot to me, but I was glad to be a part of it. I could see how such an essential teaching resource might benefit students' learning. This let me understand how beneficial digital learning as a teaching-learning platform and technique.

After seven years of teaching at that school, I was picked as a permanent teacher from the direct competition and was allowed to work at one of Nepal's most prestigious schools. Fortunately, I started when the school celebrated its golden jubilee year that year. On the closing celebration of the golden jubilee in 2073 BS, the school installed ICT infrastructure in every classroom, built one ICT lab, and handed laptops to all permanent teachers. We used to present some digital information to students through movies, PowerPoint slides, and documentaries because we were given a laptop. The classroom was ICT friendly and had decent internet. These instructional resources aided in improving student motivation and performance.

## Figure 1

CHINA Sucturpashchim Province Bardiya Deukburi Deukburi Deukburi Province Bardiya Deukburi Province CHINA CHINA CHINA CHINA Province Provinc

Map of Nepal Showing the School's Location

(World Maps Online, 2024)

I was really happy with the practice and was convinced of technological innovation. Technological innovation refers to a complex system composed of more than one technology entity and a relationship between each entity and at least one other entity in the system to achieve certain goals (Watts & Galvin, 2020). Concerning this, Arthur (2009) views technological innovation as a combination of many technological changes that productively enable vital improvements in efficacy. Likewise, Spillane et al. (2017) put it as a process by which new ideas are reintroduced, bringing transformative changes.

In this study, I refer to the technological innovation used in education, especially in teaching and learning at the school level, and its use in teaching-learning activities is a current requirement that we must gradually adapt to. The school also asked us to continue and upgrade, so we used it as needed. We were about to replace chalk-and-duster pedagogy with student-centered education through digital interaction and digital content. In this line, the Government of Nepal has stressed technological innovation in different plans introduced by it (MoEST, 2022).

Unfortunately, the COVID-19 pandemic forced us to digitize information and teach online. We could offer online classes since we had laptops, and the school had ICT infrastructure and a Suite account for all teachers. We soon adopted it, and with it, we began flipping the classroom using digital materials from the outset. As of COVID-19, there was a requirement for a paradigm change, and we, the young brains, were expected to assist it. Such practices always struck me as beneficial, and I did

them joyfully. I did that and tried to learn everything I could about its use and utility. As a novice to the flipped classroom, I was eager to learn more about it, so I devised a strategy to conduct research in this area to promote the higher-order thinking ability of Revised Bloom's Taxonomy, which says to apply, analyze, and create as students' involvement seems to be encouraging in it and it's a demand of time also (Armstrong, 2010). Today, in the age of information technology, technology is used to do every task, including education. We need to change classrooms from lectures to engagement and classrooms as home and home as a classroom, which has been a far cry, and the COVID-19 outbreak has opened the door. I came up with a plan to explore flipped classrooms, which I happened to learn through the internet.

As opined by the Flipped Learning Network (FLN)," Flipped learning is an instructional approach in which teaching material is moved from the student's learning room to the personal learning space, likely to result in a vibrant, active learning environment in which the instructor allows students to develop as they apply concepts and start engaging imaginatively in the subject material." (FLN, 2014, p. 1). Although flipped learning has been confirmed to be a new, effective method of imparting knowledge to students, several challenges and hurdles exist to its implementation (Hwang et al., 2015; Lee, 2016). Many approaches are proposed for implementing flipped learning, and it's a widely accepted and practiced teaching model.

A flipped classroom, for Bergmann and Sam (2012), is an environment in which "what was previously done in the classroom is now done at home, and what was usually done as homework is now performed in class" (p. 13). According to Lage et al. (2000), "Reversing the classroom is all about changing the events that have traditionally been done inside the classroom, now done outside the classroom, and vice versa" (p. 32). Flipped learning is most commonly associated with students providing instruction via video lectures, but it is simply the outer layer of work. Not only capturing informative content but transmitting it to pupils is required in a successful flipped classroom.

Going for flipped learning is the present demand and a raised issue of quality concerns has been identified in the most extensively utilized traditional instructional methods, where the teacher is the transmitter of knowledge, and students remain passive learners. Teaching is carried out with the help of books, a chalk duster, and some notes (Dewey, 2018). Traditional ways of teaching have been in use for decades, and there have been rising and ongoing requests for educational institutions to rethink

their learning tactics and systems (Arum et al., 2012). According to some experts (McLaughlin & Persky, 2017), traditional learning approaches do not develop creative and critical thinking and sophisticated and higher reasoning skills, which are essential issues in student learning.

As a result, a new kind of teaching and learning known as blended learning was introduced in the early twenty-first century, which advocated blending technology-mediated online learning with traditional face-to-face (F2F) classroom learning (Graham, 2013). Recent constructivist theory demands that Learning theories emphasize learners' active engagement and self-regulatory processes. Active learners have strong inquiry abilities and constantly learn, reflect on, and regulate their knowledge base's learning mechanisms to expand their knowledge (Pintrich & McKechnie, 2000). Students must participate actively in learning to maintain their knowledge (Canaleta et al., 2014; Niemi et al., 2016). The fact that teachers cannot simply convey information is a significant restriction in education; rather than imparting knowledge to pupils, they must actively build knowledge in the classroom (Thompson, 2013). Students learn when they get involved.

Many educators are calling for implementing flipped learning, an active and creative education paradigm, due to recent advancements in active-learning pedagogical strategies and developments in instructional innovation and engineering (Sletten, 2017). As a general paradigm in the teaching and learning process, flipped learning is a framework that allows teachers to reach each student (Bergman, 2018). These days, flipped learning is on the rise.

One explanation for the rapid adoption of this trend is that subjective information is compiled in engaged learning settings (Hwang et al., 2015). Many educational institutions now use blended or online learning, which has been found to have an annual global expansion rate of at least 46 % (Hilliard, 2015). EDUCAUSE (2017) identified blended learning as one of the rapid tools of technology enhancement in higher education in its annual survey, demonstrating that the blended learning method was one of the major challenges in teaching and learning endeavors.

However, this method of learning is not without flaws. One of the issues is that aged students appear to resist using the flipped learning strategy (Hewitt, 2017). Instructors may give instructions without considering the intricacies of learning or considering the diverse learning styles of individual students (Ritchhart & Morrison, 2011). Furthermore, if students arrive unready for class without having watched the video, teachers will be unable to complete the course as intended (Bevilacqua & Bergmann, 2018). When compared to typical learning styles in school, it may also neglect other important aspects of learning, like interaction and curiosity (Bergmann & Sams, 2014).

Consequently, researchers in education sectors have highlighted the vitality of more innovations in education while stressing the importance of creating a more pupil-centred atmosphere where learners engage actively in interactive, self-directed, and higher-order learning activities (Hayes et al., 2012). Traditional teaching and learning actions are flipped around in this type of learning as new technologies are used to deliver direct lessons beyond the classroom setting, releasing classroom engagement for other ventures and interactions where analyzing, evaluating, and creative skills are encouraged to apply.

## **Historical Foundation of Flipped Learning**

The coinage of the flipped learning model has a history of around twenty years. In a work titled 'From Sage on the Stage to Guide on the Side, published in 1993, Crouch and Mazur (2001) opined that academics in university classes were almost the figure at the center of the classroom who deliver knowledge even without letting students think and learn any aspect of teaching. She named this model the transmittal model that teachers use to transfer knowledge. Being favored by the constructivist approach, she started to opine openly and stated that knowledge should be gained individually and shared that the role of teachers should be a guide rather than a transmitter of knowledge. However, the flipped classroom has no direct linkage (King, 1993). It is taken as a background of the concept.

After King (1993), Erick Mazur, a Harversian professor in 1999, developed a peer teaching strategy, which was rooted in the development of the concept of the flipped classroom model (Crouch & Mazur, 2001). Following their footsteps, flipped classrooms turned out to be used as a concept, calling this classroom flip and stressing the usefulness of making students active outside of the classroom and having control of their learning. In the year 2000, Lage et al. (2000) used a flipped classroom to address the needs of students with different learning styles, which was given the name inverted flipped classroom. (Lage et al., 2000, pp. 32-34). The course was applied in seventy-five-minute classes twice a week with the help of handouts, worksheets, and videos, which increased student involvement. Despite the contribution of Baker (2000) and Lage et al. (2000), the flipped model did not continue to be practiced.

Flipped came on the rise when Bergmann and Sams (2012) started using PowerPoint on the internet to expand students' learning outside of the class and concluded the need for flipped classrooms in teaching-learning activities, not only for those who miss the lass. Bergmann and Sams (2012) found flipped classrooms effective because of their self-paced learning strategy, which made them extensively used worldwide. For it, they published a series of books. Graham (2013) reported that The MEF University of Turkey had declared the first university to adopt the fullphased flipped teaching model and had its first graduates in 2018 who were completely part of it (Mazur et al., 2019). Turkey's leading role remains remarkable in the history of flipped classrooms. This is how flipped classrooms came into practice.

With this long-rooted background, flipped learning has increased in popularity and now has become a leading pedagogy in online learning, which earlier was used to ensure the possibility of distance education for those who miss regular classes for several reasons. Its effectiveness is on the rise largely through pandemic situations like COVID-19, which largely affected the world (Bozkurt & Sharma, 2020). With this background, it's clear that flipped classrooms are even more useful during a pandemic and other critical periods, not only on normal days. Though the flipped classroom started to rise in 2012 and till the end of the year 2021, it has reached its climax and become very popular, impacting formal learning and face-to-face classes too (Gopalan et al., 2022). Gradually, with the advent of educational technology, flipped learning has become a widely practiced pedagogy.

While exploring the past literature concerning its history, "flipped learning" has been popular with different names in different timeframes as every scholar has given names differently. Which includes Flipped classroom (Pierce & Fox, 2012, classroom flip (Baker, 2000), Inverted Instruction (Romero & Bobkina, 2024), Flipped Instruction (Ding et al., 2021). From this, it is known that the concept representing it also differed due to increased interest in FC over the years. Its effectiveness is perceived as rising conceptually beyond the teaching model.

### The International Context of Flipped Learning

Flipped learning is a widely known pedagogy. It is a pedagogical model that continues to advance education by enabling instructions to adjust various teaching strategies and learning, aiming to engage students more than in the traditionally practiced class where the teacher is the transmitter of knowledge (Flipped Learning Network, 2014). Looking at the world's different places, flipped classrooms gradually increase their scope in different countries.

In the United States, where the flipped classroom model originated, extensive empirical research demonstrates its effectiveness in higher education, particularly in Science, Technology, Engineering, and Mathematics (STEM) disciplines. For instance, a study by DesLauriers et al. (2011) found that students in a flipped physics course significantly outperformed those in a traditional lecture setting. Similarly, in research by Zainuddin and Hemibrain (2019), the effectiveness of this model in enhancing student engagement and performance in higher education is highlighted. The study revealed that the learners highly appreciated the flipped learning as the flexibility of accessing lecture materials at their own pace. They were found satisfied as it allowed them to have a more in-depth understanding and retention of course content at any time. However, challenges remain even in the USA, including all students completing pre-class activities, adjusting to the newly increased workload, and preparing and sharing in real-time. Flipped Learning Network (2014) shared that consistent and effective implementation of flipped classrooms requires substantial training and resources for educators, even in the USA, where there is connectivity and digital literacy.

In the case of China, the flipped classroom model has also seen vital adoption, extensively, specifically in language and STEM education, in recent days. A study by Zhong et al. (2023) presented that the flipped classroom teaching approach improved student outcomes in English language learning. They opined that it was because of more opportunities provided for practice and continued interaction during class time that improvements in students' critical thinking and problem-solving skills were effectively increased. Despite the study's positive outcomes, it also indicated some barriers like accessing technology equally and initial support and motivation from students who usually practiced traditional lecture-based teaching methods and habituated to being passive. In the case of this situation in China, a study by (Li et al., 2021) suggested starting continuous professional development for educators.

In Sweden, the flipped learning model is part of its educational reforms to promote student-centered learning. A study by Ericsson et al. (2023) searched the impact of flipped learning in Swedish high schools and found that it is useful in fostering a more collaborative and engaging learning environment as the approach remained effective in subjects like mathematics and science, where students could engage in hands-on problem-solving activities during class time in an increased manner.

Nevertheless, the study highlighted the success of the flipped learning model lies in the quality of the pre-class materials provided and the active and honest participation that students display. Teachers expressed a need for professional development to design flipped classroom activities and effectively manage classroom dynamics. The flipped classroom model in Turkey has been fully implemented in secondary and higher education. Kurt (2017) carried out a study in teacher education and found that the flipped classroom approach of teaching contributed to higher levels of student satisfaction in courses related to education and engineering in particular and contributed to creating a positive impact on students' self-regulated learning skills generation.

However, the study suggested some challenges mainly related to cultural attitudes toward traditional lecturing and the need for extensive technological infrastructure, stating the difficulty of switching. To overcome the situation, timely training for educators and advancing digital tools are recommended widely (Kara, 2021). This study focused on the need for training and the application of more digital tools. The flipped learning model has also been used in other regions, such as Australia, South Korea, and Brazil. Many research studies there indicate its almost similar benefits as it is useful in increasing student engagement and improving learning outcomes in schools and universities. A study in South Korea by Kim et al. (2021) found that flipped learning was largely effective in rapidly generating collaborative learning and critical thinking skills among high school students without hesitation. In the case of Korea, flipped classrooms remained highly useful. Similarly, in Brazil, research by Ribeirinha and da Silva (2021) unfolded the positive impact of the flipped classroom on students' motivation in secondary education and highlighted the importance of required awareness in the context where culture is dominant and random application might hinder the situation.

Visiting the world context, the flipped classroom model has outlined important benefits in various educational settings that exist globally. These include improved student engagement, better academic achievement, and the generation of students' critical thinking and self-regulated learning skills. However, challenges of technological access, cultural aspects, and the better need for professional development for educators have been found as a part of the educational system. For further endeavors, urgently addressing the challenges of supporting targeted interventions to best apply the flipped classroom model is required.

#### Flipped Learning in Nepal: A Short Overview

The implementation of flipped learning in Nepal can be dated back to the early 2010s, as the availability of internet connectivity and broader digitalization moves in the country. Many initiatives have been taken by governmental and nongovernmental organizations aiming to modernize the education sector in Nepal (Khanal et al., 2017). Nevertheless, this teaching approach, though best suited to the world, is not that easy and flawless. Although flipped learning has been practiced in education for a long time in Nepal, previous studies have raised significant barriers to implementing it. These include technological resources, connectivity, enough teacher training, and teachers' readiness for pedagogical change (Ghimire, 2022; Laudari, 2019; Rana, 2022; Rana & Rayamajhi, 2024). Rural regions are still deprived due to inadequate infrastructure, training, and skills teachers require.

Besides these challenges, many studies revealed positive outcomes of flipped learning in Nepal as students are highly displaying engagement levels and skills like problem-solving skills and teamwork (Adhikari et al., 2020). Teachers also rated it high in terms of active learning in classrooms (Luitel & Taylor 2019). A study by Gyawali (2023), which was carried out to unfold the challenges teachers meet while implementing flipped classrooms, has revealed that it was ineffective because of connectivity issues and training t teachers lack in its right application. It was carried out in the early period of Nepal, and this has only explored the challenges. The flipped classroom has been widely practiced since then. Exploring the present condition is required.

Flipped learning in Nepal is still in its early stages, but the existing literature presents welcoming and disappointing results (Adhikari & Rana, 2024; Laudari, 2019). To have full pledge results of this pedagogy still required to explore more, including secondary teachers' perceptions and practices, to explore it in depth and to unfold the recent outcomes as the flipped learning approach is practiced but unplanned based on conceptual understanding and effects of rapid digitalization after COVID-19 in Nepal.

#### **Flipped Learning and its Approaches**

Technology in education opens up a world of possibilities and hope for both boundless and cross-border advancement. As a result, teachers are looking for methods to incorporate technology into the classroom to provide their pupils with improved learning opportunities (Koehler et al., 2004). Using numerous media technologies allows instructors to fulfill the queries of pupils using diverse styles of gaining knowledge (Bryant & Hunton, 2000). Flipped learning is that kind of learning and teaching framework for change. Lately, flipped learning has been taken as a crucial change-maker in a learning context.

Flipped learning is said to be a student-focused learning method because students participate in interesting activities throughout class time, and the teacher's role shifts entirely to facilitating or observing, helping students to engage in active learning. It enhances constructivism. Pupils are to take charge of the study; instructional time is unrestricted from boring lecturing to wide-ranged exercises, teamwork, and interactive activities and complete a new practice of the teachercentric model and is to attract and involve students fully.

In flipped learning, instead of simply informing students in a sit-and-listen manner, a classroom frees up lecture teaching time and gives learning options to students. Teachers can use this model to instruct their students. "... can deliver this instruction by recording and narrating screencasts of work they do on their computers, creating videos of themselves teaching, or curating video lessons from trusted Internet sites" (Hamdan et al., 2013, p. 11). Nonetheless, elementary and post-secondary education instructors are discovering creative classroom reorganization techniques (Strayer, 2007) to strengthen the learner's interest (Bergmann & Sams, 2012). Nepal is also going for it for some practices, and I have not seen such identical research in this noble area.

Kurihara (2016) opined that using flipped learning provides less time for developing lecture slides as it shifts from a more engaged teacher to a more engaged student. It is more time-friendly and sometimes could be channelled to produce engagement in-class activities to deepen the concepts and broaden the scope of the student's knowledge. Flipped learning offers wide use of media and technology, allowing instructors to fulfill the necessities of pupils' diversified learning techniques (Bryant & Hunton, 2000). So, flipping to learn more from teacher's engagement to students' engagement is the idea that flipped learning demands.

The abrupt rise and popularity of flipped learning has pressurized its application, and its use is multiplying worldwide in K-12 education to improve teaching and ensure a paradigm shift in the education field. This new approach is found to attract teachers and students as it demands home as school and opens the door for learning everywhere with provided materials, expecting students to be explorers and self-paced learners, as well as ensuring problem-solving and teamwork qualities in them. This pedagogy links to home and school learning and learning through online and offline modes, keeping students' needs at the center.

#### **Seamless Flipped Learning Model**

Wong et al. (2016) defined seamless learning as "when a person experiences continuity of learning and consciously bridges the multifaceted learning efforts, across a combination of locations, times technologies or social settings (p. 10). "Flipping the class incorporates the wireless communication technology features into the flipped learning model. The model effectively guided instructors and researchers to develop effective flipped learning plans and activities to make the students seamlessly learn in the classroom and home setting. The founding principles and strategies for technology-supported seamless learning include knowledge construction tools, learning based on the problem, individual and collaborative project-oriented learning, peer assessment, and peer gaming competition. All of these were incorporated into the model, which was found to be an effective flipped learning approach.

#### Flip2 Learn Flipped Learning Model

Simply assigning some tasks to students can't help us. Kauffman (2004) states that many students struggle to self-guide and self-manage to accomplish tasks in a technology-enhanced atmosphere with zero support and guidelines. This may result in extreme distress, which will eventually lead to poor performance (Azevedo, 2015). To help eradicate these issues, Chen et al. (2018) have proposed a technologically assisted flipped learning venture for language learning known as Flip2Learn. The sole goal of the model was to facilitate and guide student self-regulation and performance. A quasi-experimental study showed that this new technology-based approach made a magnificent and positive aroma on learners' performance and prepared them better for flipped classroom activities.

#### **Co-regulation and Co-creation Model**

Traditional flipped learning mostly outlines watching videos, which are then discussed further in the classroom. A newly framed flipped learning model with an emphasis on co-regulation and co-creation was an extension of the traditional model by including parameters that address the values of peer assessments as embedded evaluation and the job of the instructors, as well as learners, during the learning process. It was proposed in the works of Blau and Shamir-Inbal (2017), and they are best known for this model. After exploring the model's efficiency, the authors found that the model promoted active student-increased learning both inside and outside the classroom context before, during, and after the class lesson (Blau & Shamir-Inbal, 2017). Furthermore, the model promoted learning regulation, extensive individual learning, collaborative peer interactions, and continuous dialogue. Teamwork co-creation, self-regulation, and co-finding the learning outcomes and textual outlines are rare in secondary education, and this approach aims to incorporate all of them into a novel flipped learning approach.

### **Exploration of the Essence of Flipped Learning on Student Learning**

In this modern era, with more digital technologies in the learning environment, both the students and instructors must adopt different learning styles and needs and accommodate the various learning spaces as needed (Gracia & Santons, 2017). Previous research has suggested that flipped learning significantly impacts learners' achievement levels, engagement, motivation, and interaction (Lee et al., 2017; Zainuddin & Halili, 2016). Thus, this section briefly illustrates the coverage of past studies on the influence of flipped learning on these learning consequences.

#### Students' Achievement

Flipped learning has a significant and positive role in student learning achievement. The increased face-to-face time and continuous engagement of students are supposed to have further promoted learning achievement (pass rates) in class (Bormann, 2014). Having shifted from the traditional forms of content delivery, such as textbooks and normal teaching, is perceived to be less effective by most studies on flipped learning, and as such, more frugal means, such as those in flipped learning, would aid in promoting achievement as confirmed by Gracia and Santons (2017) research conducted in Gen Z EFL students in Indonesia that reported flipped learning results in students seen progress from low to high-level achievement in English. A study by Kim et al. (2014) outlined the positive impact of flipped learning compared to traditional ICT-based learning. Furthermore, the smart-based flipped learning approach was meant to significantly enhance self-paced learning potential as compared to the old ICT-based and normal flipped learning strategies. AL-Rowais (2014) also investigated the impact of flipped learning on the doings and achievement of learners of Saudi Universities and found that it had a good impact on the learning achievements of students, which says that when flipped learning is appropriately used in the classroom, student learning achievement will be enhanced.

### Learners' Engagement

Many researchers have found that flipped learning vitally and positively strengthens students' engagement in the learning task. According to Bormann (2014), flipped learning provides a more engaging learning environment. Butt (2014) asserts engagement is the depth of an individual's cognitive and physical interaction with the content. Other researchers who found similar results include Huang et al. (2019). So, the desired flipped classroom is to enhance the quality of study since it reduces monotony and thus makes the lesson more interesting to the students, making them more engaged in the activities with enriched dialogue, the promotion of learner autonomy, and a thoughtful course design or plan, the student's engagement is increased.

### Motivation

The flipped learning method influences student learning motivation. Fisher et al. (2018) suggest that to implement successful flipped learning and instruction, the student must carry out the preparations before the classes. As such, the flipped instructional design should motivate the students to do the work. This also means that the student's motivation may depend on the flipped learning approach. In connection to this, Wu et al. (2017) found that theoretically oriented flipped instruction, which uses both writing and orally conducted interaction, significantly improved motivation in students as they used idioms more actively in the classroom. Consistent results were also highlighted by Osterlie (2018), who concluded that flipped learning meant significant concern for the attainment values and expectancy beliefs in students regarding participation in physical education, which further influences their motivation positively. On the other hand, Kim et al. (2014) developed a flipped classroom learning approach and implemented it in a real classroom. They found that

it was associated with substantial improvements in self-efficacy, but the improvement in student motivation was insignificant.

However, to improve motivation in students, the method had to be improved, and meta-cognition was added to their instructional processes. These findings show a long way to lead the importance of flipped learning in improving student motivation. Student motivation might be negatively affected when the instructor fails to use the right strategy. Smith (2015) found that in his mixed-method study done in class five, students in one flipped class and another traditional class found that the flipped model failed due to their lack of connectivity at home, and homework submission and interaction were found in the students in a traditional class.

#### Interaction

Various studies are to support the findings that flipped learning promotes student interaction in the classroom. Lin and Hwang (2018) have proposed a flipped learning technique based on an internet community for teaching English orally as a Foreign Language and the factors that impact the students' flipped learning achievements. It was found that flipped learning strengthened online participation and increased the interacting behaviors of the students during the lessons. Lee et al. (2015), in their comparative analysis of verbal interaction in flipped learning and the traditional forms of teaching, found that while verbal interaction in the conventional forms of teaching is one-way communication and not that effective, flipped learning was found to offer a more interactive communication process in-depth. Roach (2014) also found that flipped learning increases active learning and interaction in economics lessons. Few studies have focused on how flipped learning enhances interaction. However, this may be because flipped learning requires the learners to interact more actively with each other and the instructor. However, there may be a need for further studies in these practice gap exists in our context.

#### **Statement of the Problem**

Despite the rapidly growing adaptation and interest in the flipped learning model as an innovative pedagogical approach in the global context of school education, there remains limited understanding of its implementation and effectiveness in diverse geographical and advancement of technology and sociocultural educational contexts, particularly in Nepal. In Nepal, traditional lecture-based teaching methods have deeply dominated for a long time, causing it to continue to the ty present time; the adoption of flipped classrooms outlines both opportunities and challenges that are not yet fully explored through there exists the practice of its Nepali context.

The lack of comprehensive studies on the perceptions and practices of teachers towards this model while implementing such a paradigm shift in the Nepali educational system remains a gap in the literature. This study aims to address this gap by exploring a detailed narrative inquiry of perceptions and practices of secondary teachers surrounding flipped learning in Nepal.

Through this narrative inquiry, the research seeks to explore current practices of the flipped classroom in Nepal. There exist challenges as there is still no adequate framework to explore teachers' experiences, but it is required to know their practice and understanding of flipped learning as the exploration of this topic would contribute to uncovering the unique factors that influence the success or challenges of flipped classrooms within this specific cultural and educational context, of Nepal. This specifically contributes valuable insights to the broader discourse that exists on innovative teaching methodologies these days and contributes to the creation of a conducive teaching-learning environment in this era of paradigm shift in a better way, with the formulation of policy and solving the existing challenges associated.

Moreover, the wider use of the traditional teaching approach has dampened the learning outcomes, and the teacher as an expert is a dominating fact. We are talking about the need for learning in the current century, which demands critical thinking, collaboration, and problem-solving. That is to be fulfilled by flipped learning. Roach (2014) opines that flipped learning can be used in conjunction with standard classes to enable students to engage in more cooperative and engaging learning. For the expected teaching-learning activities, quality concerns, and studentcentered teaching technique, flipped learning sounds great and an ultimate choice. Adapting a flipped learning approach can result in increased opportunities for technology-assisted constructivist teaching and learning support.

Although there is no consensus on the most effective strategy for implementing flipped learning in the classrooms, that is equally crucial to investigate how flipped instruction can be implemented effectively to better support student learning (Blau & Shamir-Inbal, 2017; Leem, 2016) in new contexts where digital use is much easier than before. The desire to support student learning through digital resources and learning systems further increased due to the effect of the pandemic. It not only created problems but also proved to be an opportunity to bring change to the traditional way of teaching. Many teachers who never delivered their classes online before online mode learned to use technology and used it as we are diverted to online teaching due to the pandemic. It has also been stated that there is no single perfect flipped learning technique and common practice, and several approaches must be integrated or invented depending on the subject and learning setting to convey knowledge and improve student learning performance successfully.

There is a rapid and versatile change in education and flipped learning is used largely in the teaching-learning process throughout the world. But in the case of Nepal, its use is very less. This is probably because of teachers' unwillingness to change practices from the traditional way of teaching, like having teacher-centric teaching, and probably not being willing to adopt new ways. Another concern might be their lack of confidence to adopt innovative ideas. This might be due to a lack of individual readiness and resources, no validating ideas on its use and appropriateness, and support from the school side, too.

Furthermore, there is no adequate idea and competency on the use of flipped classrooms, no willingness to work extra hours of teaching, a lack of adequate training for teachers, no corresponding education policy, and not enough time to prepare because of a heavy workload. Moreover, it might be their pressure to finish their coursework on time, their misunderstanding of teacher-centeredness, the teacher being a complete source of knowledge, and inadequate opportunities to explore this area. This is an urgent area that needs to be explored as it's a timely and relevant topic in teaching-learning. Hence, some pertinent questions about the lack of flipped learning in schools are: Why is flipped learning not fully grasped by Nepali teachers? Is it because they are unaware of what it does and how to implement it, or are they reluctant to use it in their teaching context?

These days, as of the COVID-19 pandemic, people are more concerned about a paradigm shift in education, and by hook or crook, schools and teachers are to adopt technology as it is the demand time. Schools are doing it because it offers the availability of new content in advance and helps pupils to be prepared for further learning in the real classroom (Crouch & Mazur, 2001). Mazur (2015) puts flipped learning to promote peer collaboration and interaction among students; it also develops a harmonious learning culture (White & Frederiksen, 1998), which is the demand of twenty-first-century learning in schools. It doesn't mean that flipped learning only has advantages; it has some drawbacks, such as students not preparing in advance or teachers not giving sufficient time while preparing the digital learning content. Lamsal (2022) has shared that teachers found it challenging as they lacked technological competency and could not run such projects smoothly.

Likewise, Neupane (2017) has stressed that flipped classrooms are challenging as people have no trust as it is new, and teachers have no command over technology, as Nepal has just institutionalized technology in education. Having the support of all this, there is a chance to learn about and examine the applicability of this paradigm in Nepal's digitalized educational environment; need to know how flipped learning is perceived and how they are practicing it in our context as it can contribute a lot to the new insight needed for change in education after the postcode period where digitalization has risen up. Nepal has stressed the use of more new and innovative pedagogies (Nepal Education Sector Plan, 2023-2032/23). Moreover, I found no research carried out in this domain and design concerning teachers' experiences in flipped classrooms.

# **Purpose of the Study**

This study aimed to explore secondary teachers' experiences of using flipped learning. While teachers are working in diverse contexts of teaching and learning using flipped learning as one of the strategies, studies are limited in highlighting how the teachers have experienced using the flipped method in their teaching. This study is situated within this concern, focusing on their perceptions and practices of flipped learning.

## **Research Question**

To materialize the aforementioned purpose, the following research question has been formed for this study:

1. How do secondary school teachers narrate their stories of perception and practices of flipped learning?

## The Rationale of the Study

I am a teacher and closely observe teaching-learning activities. I was always keen on finding newness in practice and went for some innovative pedagogies where students' full engagement is expected. I was a bit concerned about a pedagogy that can be personalized pedagogy. Personalized pedagogy is used to address the needs of all students or to have justice for all (Peng et al., 2019). Teaching is carried out by seeking flexible and timely pedagogies for changing practices. I adopted the newest ones, whichever I could explore, like questioning, group discussion, and more. I also

learned to practice flipped classrooms during COVID-19 and was fully satisfied with it. Though I had little knowledge of the flipped classroom, it prompted me to explore this area broadly.

Progressive teaching demands a paradigm shift. What is being practiced may not be beneficial in the age of science and technology, where everything takes place with the support of technology. This research adds to the literature by unfolding the teacher's intent regarding flipped learning and developing educational plans, frameworks, and contextual strategies in the Nepali context. Previous literature (Laudari, 2019; Rana & Rana, 2020) revealed that traditional educational techniques need to be reformed according to the changing dynamics of learning and learning conditions. Nepal is to adopt a conducive teaching-learning environment for the newest and innovative teaching-learning environment as per the paradigm shift in education. There are questions of quality, efficiency, and relevance. This study would contribute to finding answers to these questions to some extent.

Traditionally, most course learning achievement solely depends on the learning ladder created by (Anderson & David, 2001). But basically, only the lowerlevel achievements have been met. This has further strengthened the knowledge among students, parents, and other education stakeholders about flipped learning and its essence in the contemporary educational context.

To sum up, the study has attempted to supplement existing information in this area, providing further insights for actors and policymakers in the education field, particularly on how to enhance the delivery of teachings in the classroom. Likewise, the study's findings are expected to benefit pedagogues, policymakers, and future researchers in higher education pedagogy, particularly in Nepal. Research findings broadly contributed to letting people rethink how flipped learning benefits students' progress and motivation by strengthening the quality of learning and creating new identities for teachers.

Further, the consequences of the research could help educational institutions institutionalize flipped learning, as in Nepal, it is required to adopt the newest pedagogy for innovative teaching by overcoming the challenges ('teachers' training, infrastructures, digital divide) in online learning and learning that uses digital technology, the findings have bridged the need for flipped learning in a pandemic like COVID-19, and young and novice teachers to adopt it as they are techno-shave and uplift educational standards through flipped learning in this competitive age.

#### **Delimitations of the Study**

The study aimed to explore the teachers' perceptions and practices of flipped learning in their professional lives. The study only focused on the teachers' experiences of using flipped learning in the schools that practiced the flipped method of teaching and learning. It has gone only for the used and available practices, limiting their context and resources. It aimed to be limited to the virtual classroom that they practiced during the pandemic and physical classes in the post-pandemic classrooms. I selected these schools as I knew that the concerned schools were having the practice of flipped learning from the professional learning community since I am a teacher. It has only explored teachers' narratives on the contribution of flipped learning to students' interaction, engagement, achievement, and motivation to learn. It is specifically related to or adhered to practices established after the COVID-19 outbreak and shifts in teaching-learning practices. I confined it to secondary schools in urban areas with technology access. It only touched on the present practices and perceptions of flipped learning and also linked their experiences of flipped learning adaptation during COVID-19, especially virtual classes.

## **Organization of the Study**

The dissertation has been divided into five different chapters in order. The first chapter deals with an introductory part of the dissertation that starts with my own experience and resemblance concerning technology use in the teaching-learning process and students' craze and zeal when they use it. The chapter further covered my reflection and series of experiences and incidents that happened, and I noticed in my teaching life how technology can make students happy and more motivated for learning, as well as the craze students have for technology. Similarly, this chapter includes the statement of the problems, the purpose of the study, research questions, the rationale of the study, and delimitations in an orderly way.

The second chapter presents the order of the reviews of different kinds of literature as required by the dissertation, followed by the theoretical standpoints that this study used. This chapter helps set the gap for this research and has helped me to know what exists, what is being missed, and why this is required to explore.

The third chapter outlines the methodology this research has mapped, which presents different data collection methods as required. It has provided details of my philosophical understanding, research design, data collection method, data analysis, and other body of methodology, stating what I did and how I did it, particularly in framing this dissertation.

The fourth chapter presents interpretation and discussion in different sections concerning the narratives of the teachers using flipped classrooms in their teaching journey, experiences, practices, and more. The fifth chapter showcases the discussion, and the last chapter is about the dissertation's conclusion, which includes the researcher's reflective notes.

# CHAPTER II REVIEW OF RELATED LITERATURE

This section presents the review of the concerned study, based on themes including connectivism as a theoretical framework, connectivism and its effectiveness in learning a critical review, and constructivism as a theoretical lens. It further presents literature on digital technologies in creating flipped learning, formal learning in the online learning environment, and self-paced informal learning to provide background to the flipped learning adaptation. This chapter further presents teachers' perceptions of flipped classrooms globally, flipped learning and policy in Nepal. It concludes with the need to explore how flipped classroom helps students increase engagement, motivation, interaction, and achievement from the teachers' perspectives by presenting my study's gap and conceptual framework.

#### **Connectivism as a Theoretical Framework**

Connectivism is known for its advocacy that knowledge is distributed across connections and learning is possible through systematic connections of networks. As per George Siemens, one of the major proponents of the connectivism theory, "learning is a process of connecting specialized nodes or information sources" (Siemens, 2005). Connectivism also draws on several other theoretical perspectives, including constructivism and social constructivism. Like constructivism, connectivism validates learners' active role in constructing knowledge in teachinglearning.

In connectivism, learning is the acquisition of knowledge or information and the creation of connections between ideas and experiences needed. These connections are assisted by technology and social networks, allowing learners to access and share information across a vast network of resources at any time when required. Recently, connectivism has emerged as a learning theory in the early 21st century as a response to the increasing complexity and interconnectedness. Over the years, many research studies have been carried out to rate the effectiveness of connectivism as an approach to learning and education around the globe, including the ones presented below of the evolving digital world. The theory argues learning is a process of making connections between concepts, ideas, and experiences and that these connections are facilitated by technology and social networks for improved learning as it has made learning more accessible and systematic on platforms like Coursera (Siemens, 2006).

Connectivism is known for its key features like connecting special sources of information, the possibility learns in the absence of humans, offering more critical scenarios, facilitating self-paced and continual learning, and the potentiality to the interconnectedness of ideas and skills linked and showcasing the up-to-date knowledge (Siemens, 2005). In conclusion, connectivism is a learning theory that has emerged in response to the interconnectedness of the digital world. It is a promising approach to helping learners develop the skills they need to navigate today's complex and constantly changing world.

#### Connectivism and its Effectiveness in Learning: A Critical Review

A study by Siemens (2005), one of the pioneers of Connectivism Learning, outlined the sketch of this theory and its use in online learning environments. The author states that Connectivism Learning represents a shift from traditional instructional models to a more flexible and collaborative approach that systematically leverages the power of networks and technology. This theory demands a flexible and connected environment. Over the years, many research studies have been carried out to rate the effectiveness of connectivism as an approach to learning and education around the globe, including the ones presented below. Kop and Hill (2008) examined the effectiveness of Connectivism in a professional development context and its efficacy in acquiring new knowledge and skills and promoting professional networks when required. On top of that, it helps learners overcome the barriers associated with time, space, and speed. Likewise, Siemens and Tittenberger (2009) examined the effectiveness of a Massive Open Online Course (MOOC) designed with the help of connectivism principles. The results revealed that participants who completed the course were able to acquire new knowledge and skills and apply them in real-life situations in a successful manner. This has amplified the usefulness of connectivism in teaching online.

Similarly, in a study conducted by Mackness et al. (2010), the effectiveness of Connectivism was found in promoting collaborative learning and in helping learners with networking skills. In a study conducted by Dron and Anderson (2014), the effectiveness of Connectivism is seen as an approach to learning in a blended learning environment. The study revealed that Connectivism was useful in promoting collaborative learning and helping learners develop social and networking skills systematically. Further, it was noted that Connectivism was highly useful in promoting self-directed learning among students, which is in high demand in this era. Likewise, another study by Alam (2023) stressed using connectivism principles, especially in online learning environments. It came to conclude that Connectivism's effectiveness was seen in enhancing learners' motivation and engagement and promoting the development of critical thinking skills broadly. Similarly, a study by Siemens and Weller (2011) pointed out that learners using a Connectivism approach were found to be sound in providing critical thinking and problem-solving.

As of the stress put on collaboration and integrating diverse perspectives among students, Downes (2010) found that learners using a connectivism approach had been learning in. an autonomous way with self-paced speed. Overall, these studies suggest that the connectivism approach can positively contribute to various aspects of the learning process, including knowledge acquisition, motivation, social presence, critical thinking, and learner autonomy, as connectivism is a sound theory that promotes self-directed learning, autonomy of learning, and promotion of critical thinking as well as a tool for the promotion of collaboration and connections of networks. To sum up, connectivism offers a new paradigm in education that assists learning based on the principle that knowledge is distributed across networks of people, technologies, and organizations on different platforms.

As to Siemens (2006), connectivism is a conceptual framework that sees learning as a network phenomenon guided by technology and the socialization process. It is oriented solely toward principles unfolded by networks and complexity and theories of self-organization (Siemens, 2005). Connectivism emphasizes how critical information from networked sources is within the learning process: "the idea that learning takes place across networked learning communities and information technologies are central to connective" (Dunaway, 2011, p. 675). Likewise, connectivism proposes that learning may reside in "non-human appliances" where technology may store and manipulate it (Siemens, 2006). In connectivism, there is no real concept of transferring, making, or building knowledge. Instead, it emerges from the connections that are formed during network activity. Exporting thinking, sensemaking, and significance and screening to human and technical hubs aid in dealing with the rapid growth of present information (Siemens, 2006). connectivism bridges humans and technology in the learning process. Connectivism outlines four major pillars of learning that offer autonomy of learning, connectivity, variety, and openness access (Corbett, 2021). Therefore, it is grounded in connectivism, as it suggests that "learning in the digital age is largely dependent on the connection of learners with various sources of knowledge from the Internet and the interaction with others in communities or social networks" (Yin, 2016, p.20). I supported connective theory as flipped learning offers autonomy of learning, an open-source learning platform, connectivity of networks, and the use of nonhuman appliances in the teaching-learning process from teachers' perception and practice.

# The Rationale for Choosing Connectivism as a Theoretical Lens in Flipped Learning

Connectivism theory, introduced by Siemens (2005), opines that learning is a process that happens because of networks and connections between different aspects like information sources, people, and tools. Recently, this theory has been widely used to frame educational strategies regarding digitalization, mainly in the flipped classroom model. As in flipped classrooms, students are exposed to new content outside of class with the help of digital means and engage actively in real-time teaching. So connectivism and flipped learning are inseparable because of their nature of being complete in the presence of digital connection. Connectivism is the best fit for the flipped classroom model for several reasons. Firstly, the theory systematically underlines the value of learning environments that resemble real-world networks' complexity (Siemens, 2005). In a flipped classroom, learners explore through diverse online resources, including videos, articles, and many other available reading items, which cause this complexity, contributing to their level of understanding and retention of knowledge (Bishop & Verleger, 2013). Videos were largely effective tools.

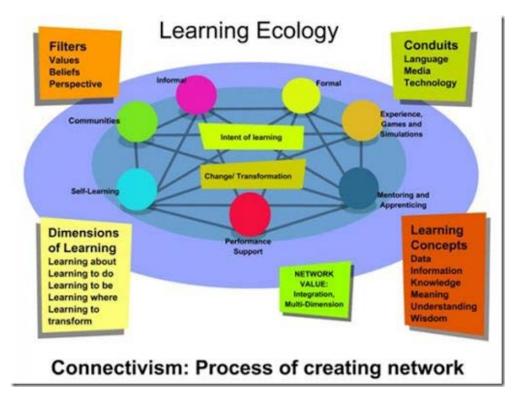
Furthermore, the focus on peer interaction and community-based learning that connectivism demands align perfectly with the collaborative activities included in the flipped model. Students are found to be developing networks with content provided and peers and instructors in their circle, unfolding shared learning experiences together (Siemens, 2005). Recent studies highlight the positive impact of this interconnected learning environment on student engagement and motivation (Lo & Hew, 2017). Connectivism also seeks collaboration in learning. Moreover, connectivism ensures the central role of digital literacy in present-day education worldwide, as networks wouldn't exist without it. Flipped learning demands

technological tools to assist in accessing information and promote collaborative learning, which allows students to control their pace and learning path, largely in line with connectivism that advocates for learner autonomy and personalized learning experiences sequentially (Dron & Anderson, 2011). It is widely used as it helps to learn autonomously.

Research studies have supported the theoretical alignment between flipped learning and connectivism. Zainuddin and Attaran (2016) revealed that applying connective approaches in flipped learning greatly enhanced student participation and interaction at a required level. They further opined that more engagement and ability to improve problem-solving skills were found in the students when learning was done in networks of information and peer collaboration (Zainuddin & Attaran, 2016). Flipped learning remains useful as of more skill generation ability. So, to ensure the context of the flipped classrooms in Nepal, I adopted this theory referent.

## Figure 2

**Connectivism** 



#### (Siemens, 2006)

I used this theory to validate the meaning-making process of study. So, I used it to address my research questions regarding teachers' perceptions. Further, this theory completely guided me in data generation and analysis. Here is the diagram showing how connectivism helps in learning.

# **Digital Technology in Creating Flipped Learning**

Digital technology in education uses digital tools and platforms, including computers, online learning environments, and educational software, to assist teachinglearning. This technology offers the door for personalized learning (Begermans & Sams, 2012). This learning ensures engagement and offers expanded access to the educational resources and information required to learn. Digital technology has helped reshape the education sector, promoting personalized learning and offering students access to diverse learning resources (Bishop et al., 2020). Teaching learning without technology in today's world has been very challenging because of its revolutionary impact on education.

Integrating digital technologies in education has given birth to innovative pedagogical approaches. One such approach is the flipped classroom model. This model reverses traditional teaching methods and systematically uses technology to facilitate pre-class learning and in-class active engagement. Several studies have explored the impact and effectiveness of such a model, showcasing varied results. The definition of a flipped classroom depicts its dependence on digital technologies for delivering instructional content outside class time (Bishop & Verleger, 2013). The resources used include video lectures, digital readings, and interactive simulations as they are available. As per Bergmann and Sams (2012), the leading scholar of the flipped classroom model, this approach not only makes better use of class time but also accommodates various learning paces, as students can review digital materials at their convenience outside of the classroom, too.

A substantial body of research highlights the positive impacts of the flipped learning model on student engagement and academic performance with the adaptation of flipped classrooms. This is reflected by Gilboy and Pazzaglia (2015), who emphasized student satisfaction and engagement levels in courses using video lectures for pre-class preparation. Additionally, the role of instructors in flipped learning brought a paradigm shift. Instructors' roles have been changed, and they are to adopt a transition from traditional lecturing to facilitating and guiding in-depth discussions and activities, which demands professional development and adaptation of teachers (O'Flaherty & Phillips, 2015). It has challenged many educators to design and implement technology-enhanced instructional materials effectively as per their requirements (Herreid & Schiller, 2013).

The flipped learning model has occupied a significant role in academia as its focus on student-centered teaching is facilitated with the help of digital technologies. This model has been very popular these days as it delivers instructional content online, keeping students connected outside of the classroom to make them active in real-time teaching (Bishop &Verleger, 2013). Flipped learning demands technologies to promote self-paced and self-directed learning in students.

# **Flipped Learning and Different Technologies**

The role of digital technologies remains vital in the successful implementation of flipped learning as they offer educators the tools to make instructional materials engaging and more interactive. Multimedia content, like videos and podcasts, helps educators provide information to pupils in a varied way that fits diverse learning ability groups as well (Large, Platt, & Treglia,2000). Platforms like YouTube and educational software like Edu Puzzle, where videos can be uploaded, can help teachers create content as needed, and students can also access it easily (Mason et al., 2013). Varieties of platforms help diverse learners.

Similarly, for flipping the classroom, there is the tradition of using a Learning Management System (LMS), including Moodle and Blackboard. This has been beneficial in course management because of the easy uploading of materials and the availability of a platform for providing input and feedback on students' work (Zainuddin & Perera, 2018). In the course of making flipped learning more collaborative and interactive, there is the wide use of digital technologies like discussion boards, group chat applications as well as quizzes for ensuring more communicative activities and teamwork development so that students can get and retain information anytime as per their pace as of these technologies (Smith et al., 2021) There is the use of a blending model in a flipped learning.

Yang et al. (2017) state that blended teaching in higher education provides motivation, increases cognitive activity, and develops skills in self-dependent work. Also, it forms awareness and self-discipline and elaborates the creative potentiality of students as they take on their responsibilities, and the organization of materials is also systematic. "Flipped classroom" is crucial because it stimulates the activity of students in the learning process through rational usage of curricular and extracurricular time in self-management as of digital technologies (Yang et al., 2017). Modern researchers have approved the content characteristics and effectiveness of "Flipped Learning" usage in terms of specifics of educational courses and various educative internet platforms (Pavelyeva, 2017). In the recent context of higher education, teachers have developed various qualitative concepts of "Blended learning" and approaches to teaching and designing academic courses (Bluic et al., 2012). There exists an integral relationship between flipped classrooms and digital technologies, as digital technology has helped flipped classrooms grow and create a higher impact on education.

# The Evolvement of the Term-Flipped Learning

While reviewing the literature, it is noted that digital technologies used in flipped classrooms are evolving. The technologies are adopted as per the time and needs of the students. There is a sequential upgrading in the history of digital technologies and their role in creating flipped learning. In the early 2000s, printed materials like textbooks, photocopied items, and homework assignments were used in the form of handouts (Bergman & Sams, 2012). The use of video cassette recorders (VCRs) sent home by instructors to students also existed in practice (Strayer, 2007).

Digital technologies were used in flipped classrooms in the late 2000s because of the rapid emergence of technologies. It was replaced with the use of personal computers and CD-ROMs because of the increased access to personal access to personal computers.CD ROMs and personal computers were used to distribute multimedia content to students so they could review it at home (Bishop & Verleger, 2013). Concerning the rise of technology, the practice of flipped classrooms also evolved. Likewise, digital videos and online streaming advertisements help educators create and distribute instructional videos using different platforms, such as websites and other early streaming platforms. (Kim et al., 2014). Similarly, educators widely use learning management systems (LMS) platforms such as Blackboard and Moodle to upload course materials and videos online (Westermann, 2014). After the rapid growth and refinement of digital technologies in the 2010s, YouTube and other video platforms were used in flipped classrooms, revolutionizing the delivery of video content and making flipped learning prompters more effective (Sung, 2015). YouTube remained the most accessible portal for learning.

Similarly, there was also the upgrading use of Screen Recording and Lecture Capture Software tools such as Camtasia and Panopto widely as they enabled instructors to record their computer screens while teaching, subsequently uploading these recordings for student review in flipped classrooms (Herreid & Schiller, 2013). This has contributed to making flipped classrooms rise abruptly. In the decade of 2010, educators also used interactive online tools like Ed Puzzle and Play Posit, as they allowed them to embed quizzes and interactive elements required to engage students (Bergmann & Sams, 2012). This has added more brinks to the rapid development of flipped classrooms as a transformative pedagogy in the world.

As of the recent advances since the 2020s, there is the increased use of Cloudbased Collaboration Tools such as Google Classroom and Microsoft Teams, which extensively support the distribution of materials and real-time collaboration, crucial for blending in-class and out-of-class learning experiences that the present era teaching demands (Bond, 2020). Recently, mobile applications have been widely used as many LMSs and educational platforms have introduced mobile-friendly versions, allowing students to access learning materials on the go and easily learn (O'Flaherty & Phillips, 2015). Technologies are evolving, giving new shapes to flipped classrooms.

The third emerging digital technology used in modern days after the 2020s is AI-driven adaptive learning platforms like Knewton and Smart Sparrow, which offer personalized learning paths based on student performance and data analytics because of their higher applicability in flipped classrooms (Hao, 2016). The last but very commonly used digital technology in flipped classrooms lately is Virtual and Augmented Reality (VR/AR). VR and AR have been explored for their potential to create immersive learning experiences within flipped classrooms, though they are in the early years of implementation (Kavanagh et al., 2017). These days, the use of VR and AR technology in flipped classrooms has increased in popularity.

To conclude, digital technologies are mandatory for educators to create and implement flipped learning environments for educators effectively. Their efficacy is seen as they benefit from engagement, flexibility, and collaboration among learners and instructors. At times, educators must also address the challenges associated with technology access and student readiness, which are the main challenges in flipped classrooms.

# Formal Learning in an Online Learning Environment

The rapid evolution of technology has impacted education and contributed to reshaping the educational landscape broadly. Online learning has emerged as a preferred mode of delivering formal education. In this review, I have tried to critically examine the scholarly works on formal learning in the online learning environment, as far as possible, and examine its efficacy, pedagogical implications, and hindrances. Online learning, known as e-learning or distance education, is an instructional experience delivered with the help of the Internet. This helps students access coursework, attend lectures, participate in discussions, and complete assignments via digital platforms at their convenience. It is widely accepted as it offers flexibility and is accessible to diverse learners.

The most relevant advantage of online learning is its ability to provide education boundlessly. The research by Allen and Saaman (2017) revealed that online learning platforms are the most democratic practices in education, where everyone has equal access to formal learning. Because of the nature of online learning, its use in formal settings has risen as professional, and others can be part of it without quitting their priorities. Secondly, online learning has offered a wider learning environment for learners and prompted educators to adopt new methods of teaching for learnersfriendly teaching, offering multimedia and interactive materials that contribute to sustainability as it offers autonomy to the learners (Means et al., 2013). However, the effectiveness of online learning solely lies in the competency of learners, materials, and students' motivation to be self-regulated.

The advancement of digital technology, like virtual reality (VR)and argumentative reality (AR), has made online education more preferred in formal settings. As per Radianti et al. (2020). Such technologies offer immersive learning platforms that remain useful in connecting real-world situations, ensuring more engagement and practical learning. It shows that the world is now marching in formal learning online. Similarly, recent literature has highlighted the importance of interaction and collaboration in online learning settings. In connection with this, Moore and Piety (2021) advocate that effective online education promotes collaboration in a large community. So, these days, using platforms like Zoom and Microsoft Teams promotes real-time interaction and collaboration, which is highly applied in formal learning.

Likewise, formal learning in an online environment is rising because of the evolving nature of the assessment and way of providing feedback in online portals used for learning. Zhu and Liu (2022) argue that digital tools are heavily enabling real-time assignments, and it has been easy to provide feedback, offering students

quick feedback. So, formal learning in an online environment has been able to keep a lasting impact these days.

# **Online learning in Nepal: Challenges and opportunities**

Online learning refers to learning that occurs online with technologies. There is increased use of online learning in Nepal, but because of varied geographical, economic, and infrastructural disparities, online learning is limited in Nepal (Rana, 2022). Only elite and urban students have high access to online learning, even having formal teaching in an online environment. After having set infrastructures, only online learning in formal settings can have a good impact in the Nepali context. Because of the forceful online teaching environment in Nepal during and after covid 19, some innovative pedagogies like flipped classrooms and gamification are common practices in limited spaces, but many educators are still not competent and lack skills that challenge online learning (Koirala, 2021; Shrestha, 2023). This scenario has outlined that formal learning in an online environment is still challenging in our context.

Infrastructures are the footsteps of formal learning in an online environment. Rayamajhi and Rana (2019) revealed the critical infrastructure gaps, focusing on internet issues, connectivity, and the digital divide as major hindrances to effective online learning in Nepal. Furthermore, Laudari (2019) opted for the training of teachers for effective delivery of online education and suggested adapting the traditional way of teaching to fit in the digital environment. Laudari's other contribution to online learning is the inclusion of student engagement by exploring how interactive tools and multimedia can increase learner engagement and motivation in online learning (Laudari, 2019). Training for teachers, lack of knowledge in making online learning interactive and learner-friendly, and inadequate infrastructures are major hindrances.

Likewise, in Nepal, Acharya and Rana (2024) have contributed to online learning. His contributions are great in connection to socio-cultural and policy-related online learning concerns. In their study, Rana and Rayamajhi (2024) further point out the digital divide between urban and rural areas of Nepal in terms of socio-cultural aspects. They further share that the digital divide has hindered the creation of equitable access to online learning opportunities for all learners. Furthermore, Rana et al. (2020) put education policy with a roadmap for designing a coherent national strategy for online learning in Nepal in the present demand. He recommends investing in infrastructure extensively. Concerned with learning in the online environment in Nepal, the continual contributions of Laudari, Rana and other scholars offer a holistic understanding of the challenges associated with a formal online learning environment and possible solutions in Nepal. Their voices are for equitable access and quality education in online learning. To conclude, their research works are crucial in understanding the challenges associated with and present conditions of online learning in the Nepali context and making it more inclusive, effective, and supportive.

Flipped learning is also a new pedagogy in Nepal that demands online access. Only a few studies have taken place concerning its concepts, but no such studies are available concerning teacher practices. Shrestha et al. (2016) emphasize the role of flipped classrooms in mitigating traditional challenges in education, like studentcenteredness and a passive learning environment. This suggested the requirement of flipped classrooms in the Nepali context, and teachers' perceptions and practices of flipped classrooms must be explored as they are useful in creating engagement and autonomy in students (Thapa, 2024). Similarly, Karki (2021) has highlighted that the digital divide has hindered flipped classrooms as flipped classrooms also demand networks and digital platforms.

For pedagogical transformation, online learning is the best strategy, and one such method is flipped learning. The literature above suggests the hindrances in online learning, so exploring this area is necessary, too.

#### **Self-Paced Informal Learning**

Self-paced informal learning is the most wisely increasing learning globally. In this case, learning is fully under the control of individuals, and they manage the speed and sequence at their convenience. This type of learning has gained popularity because of students' flexibility and autonomy (Hodkinson et al., 2002). This learning has created its space worldwide. It has several advantages. It promotes lifelong learning as it enables learners to continue learning and develop skills without compromising their commitments (Tight, 1998).

Furthermore, it is useful in regions with limited access to technology and formal education. Candy (2004) highlighted the efficacy of self-paced informal learning as it offers autonomy, ensuring engagement and motivation to learn to learners. Garrick (1998) states that YouTube videos and MOOCs (massive open online courses) are contributing to learners equitably getting knowledge and doing justice to all. Another advantage it offers is the cost. This is cost-effective, and learning can be done with free and available online resources (Livingstone, 2001). Self-paced informal learning has risen at large because learners prefer it.

Despite its popularity, it also has challenges, such as not having access to high-quality materials in every context (Manuti et al., 2015). The digital divide and the technological knowledge and skills have hindered its smooth practice (Wilson et al., 2004). Similarly, certification and recognition of the achievement of learners by institutions also create dissatisfaction in this field (Eraut, 2000). To conclude, despite the high popularity of self-paced formal learning, it has some dark sides that make it challenging. They include digital divide, infrastructures, and certification.

# Latest Trends and Innovation in Self-Paced Online Informal Learning

Self-paced informal learning is gradually expanding due to the gradual advancement in educational technology and a new shift in paradigm. MOOCs, gamification, microlearning and mobile learning, and adaptive learning technologies are the newest platforms for self-paced informal learning. The rise of self-paced informal learning platforms like Coursera and Edx.org. They are the leading platforms in self-paced informal learning. Millions worldwide benefit from slow-paced online learning (Shah et al., 2020). Research has reported the popularity of such courses as a flexible learning space (Ranieri et al., 2018). A flexible environment and self-lead pace have added the brink to rapidly making self-paced informal learning emerge.

Another new trend is microlearning and mobile learning, where learning is possible in small chunks and is popular as it can be completed. Such platforms include mobile learning apps like Duolingo and Khan Academy, which offer easy learning options (Pham et al.,2023). Adaptive learning technologies are also on the rise as they offer self-paced informal learning along with the advancement of artificial intelligence and its use in education, creating a better learning atmosphere (Aljohani,2022). Gamification is another impactful self-paced informal learning tool that offers points and badges concerned with learning experiences, makes learners more engaged and motivated in learning, and is widely liked by learners like Duolingo (Dichev et al., 2020).

All these new trends are found to be the tools that ensure engagement and motivation as they offer autonomous learning options and make learning interesting (Chiu, 2022). Self-paced informal learning is also demanding as it contributes to social learning. They engage in discussions like discussion forums, peer review, and teamwork work, but feedback is missing in such learning. Self-paced informal

learning was blamed in the past for its limitation of not addressing the needs of diverse learners. However, as of advancements in technology, learners with disabilities and challenged backgrounds also get a chance to be part of it (Seale,2014). Self-paced informal learning is very common, and its use has increased during the COVID-19 outbreak. A leading country, China has used platforms like Edmodo and Alibaba's Ding Talk, which positively promotes self-paced informal learning (Zhang et al., 2020). In recent days, self-paced learning tools have evolved with advancements in technology. The literature review on self-paced informal learning shows that it has vital technological advancements, pedagogical strategies, and easy access to the newest digital platforms. However, it is crucial time for policymakers and educators to adjust and upgrade with time to fit into the changing educational scenario.

#### Self-Paced Informal Learning in Nepal

Self-paced informal learning refers to a learning where individuals learn independently in an informal setting. In the Nepali contest, the case of self-paced informal learning is on the rise as it's been useful in adding value to formal education, mainly in disadvantaged areas. The community has made attempt attempts, and technology is assisting in such practice, as teachers can go on self-paced learning (Ghimire, 2022; Ghimire, 2011). Mobile learning apps and the National Curriculum Development Centre's (NCDEs) virtual videos on YouTube are contributing to selfpaced informal learning in Nepal (Subedi & Subedi, 2022). Likewise, cultural adaptation is also used to promote self-paced informal learning as they learn through language and culture and are made easily accessible (Pangeni, 2016; Poudel, 2023;). This has benefited learners.

Similarly, Nepal has opened E-Pustakalaya, an open learning hub with free access to educational material, directly helping promote self-paced informal learning (Khanal et al., 2017). Besides this, many non-governmental organizations (NGOs) and communities have started several projects to improve digital literacy, online learning projects, and contribute to self-paced learning (Bhattarai, 2014; Sharma, 2012). It is obvious that self-paced informal learning in Nepal is found to be useful for its systematic use in the future for formulations of policies, and effective implementation of digital tools is found mandatory for better outcomes in the future (Poudel, 2021; Rana et al., 2020). Since self-paced learning provides an avenue for lifelong learning with flexibility, accessibility, and cost-effectiveness, the challenges of the digital divide and quality control must be addressed for further educational enhancement in Nepal.

### An Overview of Empirical Review of the Flipped Learning

The review includes research on flipped learning in the local and global context. These studies focused mainly on how flipped learning helps engage, motivate, and create an open interaction among students and something more in the teaching-learning process, focusing on the perception and practices of teachers on flipped learning or classroom.

Since the flipped classroom is a widely used pedagogy in the world, having high emerging scenarios, it's rapidly being used around the globe. It's a pedagogical model that continues to advance education (Zhu, 2021). Flipped learning is an approach used to enable instructions to adjust varieties of teaching strategies and learning activities to engage students more than in a traditional one where the teacher is the leading coach. (Flipped Learning Network, 2014). There is rapid use of flipped classrooms around the globe

A case study done in South Korea regarding flipped learning as an alternative for the future class model found improved learning and rich academic performance, which also increased the level of confidence in students in flipped classrooms (Lee & Wallace, 2018). The study has been found to be beneficial in developing pupil confidence and has contributed significantly to academic performance. This can positively contribute to the wider use of flipped pedagogy in this context.

A narrative study conducted On Building Community in Flipped classrooms in four undergraduate courses at the University of Ontario, Canada, found that flipped learning caused positive learning, increased engagement, and feasible learning opportunities (Barber, 2015). This study showed the positive side of flipped learning. The aim of advancement in education is the increased engagement and participation of students, and this is largely displayed effectively with the implementation of flipped pedagogy. Lately, this has helped to add value to this teaching approach or pedagogy in a global context. According to Yen (2020), a flipped classroom in online learning is viable. Moreover, initiatives taken before, during, and after school could increase learning outcomes. Besides this, the teacher's sense of style and the mood in the classroom were proven to have favorable effects on the flipped classroom for online teaching. Studies revealed that teachers are more productive in a flipped classroom. Between 2012 and 2018, a descriptive content analysis study done on the trends and consequences of flipped learning study on six variables, primarily the design of the study, subject matter, ages, education, location of the study, and results, indicated that flipped learning is widely used in the education industry which comprises 38 and taken lead in the learning area, 12% in the learning field,84% in higher education and to know students and teachers 'opinion. As per the design, quantitative research is the leading method, followed by mixed qualitative research in the third position. It further reported that flipped learning is mainly conducted partially in many places, and we need to adopt it fully for a hundred percent and then have a paradigm shift in education (Birgili et al., 2022). This study revealed the need for a qualitative domain of research. Also, it highlighted the rapid use of this pedagogy in the world, including school education and higher education in a global context.

These days, MOOCs are a very common platform for learning self-paced, and many MOOC-based courses are designed around the globe. The USA has recently become the leading country, and the flipped model has also been used. Another study found that the students inside the MOOC-based flipped classroom performed much better than those in the regular classroom, but no improvement in identity or conscience behavior was observed (Wang & Zhu, 2019). Somehow, flipped learning boosts confidence and awareness in the pupils in self-paced MOOCS-based flipped learning. This has stressed the effectiveness of flipped learning in every context.

Another quantitative study on the course research methodologies and communication on the use of video as an educational exercise and learning management program in the flipped learning paradigm is being conducted at Stockholm University in Sweden found that students had positive attitudes, which correlated to the doubled increase in the motivation, engagement and mainly in case of low performers (Nouri, 2016). The study highlighted the importance of flipped classrooms as they promote a good aroma in the world, and their use is multiplying.

While looking into the global scenario, flipped learning is found to be the leading one in this era as every research presented here from different countries and contexts has highlighted its worth in teaching-learning activities both in an online and offline mode and distance as well as face-to-face learning. Survey research done in Nepal to know how teachers perceive flipped classrooms as a new learning tool /object concluded that teachers had a higher level of motivation in applying it (Shrestha et al., 2016). Quasi-experimental research done in high school engineering found that flipped learning significantly impacted transferring the knowledge of learning to students (Chao et al., 2015). Likewise, one descriptive study carried out by

Moreover, another quantitative study was done to examine "The Learning Behaviors and Characteristics of Students in a Mobile Applications Computer Programming Class" that adopted a flipped learning style and fully discovered that medium-performing pupils had a lot of energy regarding material access. Procrastination was also discovered in presenting groups. Even though procrastination is commonly seen to be a danger to student performance, it does not appear to have the same effect on high-achieving students in this study. Nonetheless, high-achieving students show extensive use of course materials compared to the other two groups in total (Jarrah et al., 2018). In recent studies, teachers have positively perceived the effectiveness of flipped learning. The popularity of this pedagogy is based on its high application in educational settings around the globe, and its popularity is rising daily.

While reviewing the empirical inside and outside of the country, it's noted that flipped classrooms are on the rise, and their application has brought many pedagogical changes, and teachers have found many benefits. It was also helpful in reducing the procrastination of pupils, making it easy to transfer knowledge to students, and improving self-conscience and performance. However, in this design and concerning teachers' perception, no study has been found to explore our context, and how they perceive it has yet to be explored. So, I found it quite relevant to proceed.

#### **Flipped Learning and Constructivist Theory**

Constructivism is a learning theory that advocates that individuals construct their knowledge and understanding of the environment exposed based on their experiences. This theory is based on cognitive psychology, which was deeply influenced by the works of Vygotsky (1987) and Piaget (1967). The wider use of this theory in educational settings is due to its student-centeredness. I have garlanded this theory as a foundation of my research project as a flipped classroom demands peer learning, self-directed learning, and self-paced learning by exposing them to realworld problems, opening the door for critical thinking. This theory is also best known for promoting such things as flipped classroom demand. So, it's a best fit for my research. The constructivist learning theory highlights the voices of pupils, taking students as the main part of cognition and as the active generation of knowledge construction. The main task of teachers is to promote self-guided learning by helping students be exposed to the real world (Xu & Shi, 2018). Without a doubt, the theory of constructivism aligns with the benefits of flipped learning. Ozer (2004), in constructivism theory, states that the teacher's responsibility is to provide learners with essential knowledge and tools to expand their thoughts and make conclusions exploring the world and problems in their involvement and engagement.

Constructivism opines that the use of communicative and interactive dealings in which learners play engaged and active roles can increase motivation to learn. The acquisition is socially built via interaction, engagement, and participation, which is a core similarity across the socio-constructivist approach, and the phrase is a broad category for techniques that ground acquisition in social contact (Baird et al., 2014). In flipped classrooms, pupils prepare lessons at home by viewing the materials provided and creating a sense of knowledge. They can construct and link new material that they already know. Moreover, with the assistance of their teachers and peers, learners improve their thinking in class (Ayçiçek & Yelken, 2018).

Learning is socially constructed with interaction, engagement, and participation, which is a major commonality across the socio-constructivist viewpoint, and the phrase is a collective name for techniques that base acquisition on social contact (Baird et al., 2014). The flipped education and online videos boosted the principles and assumption of constructivism by releasing class time for inquiry-based learning (Brandt, 1997). The flipped learning backed up by the constructivist theory should empower learners to be involved in communicating, imaginative, and collaborative activities during knowledge construction (Kim & Bonk, 2006).

Constructivists strongly advocate that a learning environment allows learners to explore freely and learn independently. Under this environment, students can use various tools and information resources, such as text materials, audio and video materials, and multimedia courseware (Wen et al., 2016). Further, they favor using many information resources to support the idea that learning rather than teaching is more important and necessary. Media and information are not used to assist teachers in the presentation but to support students' autonomous learning and collaborative exploration, and the learning process is to construct meaning rather than complete the teaching goal. So, I used this theory to guide my research process fully from beginning to end, as a flipped classroom offers self-paced learning autonomy and invites learners' active participation.

## **Teachers' Perceptions of Flipped Learning as a Pedagogy**

In the last few decades, flipped learning has gained vital attention as the leading innovative pedagogical approach. A large growing chunk of literature tried to understand teachers' perceptions and practices concerning this model, which has varied findings showcase the hindrances existing in educational settings and from teachers' side as per the comprehensive review by Strelan et al. (2020), flipped learning are generally perceived positively by educators, largely because of their potential to strengthen students' engagement and improvement in learning outcomes. The scholars highlighted that teachers welcome the flexibility of flipped classrooms, as that allows them to make classroom teaching more interactive and largely supports personalised learning activities (Strelan et al., 2020).

Similarly, Álvarez (2022) found that teachers are taking flipped learning as a more student-centred learning environment, as in this model, students can engage in the content provided to them at their speed and pace and offer more collaboration for discussing further. This learning pattern, for Álvarez, allows students to take full charge of their learning, thereby fostering an in-depth understanding of the lessons provided, making it sustainable (Álvarez, 2022). However, the emerging transition that flipped learning is having is not threatless. As per Lo et al. (2018), teachers often face obstacles like a lack of proper technology, resources, content, and poor connectivity. Moreover, some educators question the genuine effectiveness of flipped learning, stating the preparedness of teachers, students, and administration in its smooth application, particularly in the level and context of the educational setting (Lo et al., 2018).

A study by Hillman et al. (2021) emphasized that professional development of teachers and needful support from schools and colleges are the strong demands in making flipped learning successful. Their research further demanded adequate and detailed training and other professional learning opportunities for teachers to make the successful implementation of flipped learning. Furthermore, they opined that strong institutional support could stop some common technological issues while practicing flipped classrooms (Hillman et al., 2021). Likewise, Moorhouse (2020) successfully provided critical insight into the grounded use of flipped learning in diverse educational contexts. Their study showcased that the efficiency and efficacy of flipped

classrooms differ as per the subjects and level of understanding that people have in this pedagogy need and the size of the classroom, too (Moorhouse, 2020).

In conclusion, while exploring various past literature, teachers are more positive concerning the perceptions of the flipped classroom model. This is because of its capacity to foster interactive, collaborative, and self-paced learning for practical and adequate implementation hindrances to be overcome as the flipped classroom evolves; it is required to explore its implication and effectiveness in a different context.

#### Flipped Learning in the Policy Context of Nepal

Several attempts have been made to integrate technology into the education system in Nepal. Nepal has some ICT-based programs like the One Laptop for One Child (OLPCT) pilot project for some of the 25 districts of Nepal., the Lab model (Computer Sharing Mechanism) for connectivity, and bringing change in education via ICT and has a plan to have learning schools nationwide and capacity building for implementation of eLearning and E-education and some guidelines are ready for monitoring and implementation of ICT policy in Nepal (ICT Policy, 2015). In the same way, an ICT Monitoring Plan has been formulated for speedy and effective implementation of ICT in education to ensure the availability of infrastructures, connectivity, production of human resources, and timely content development at all levels of education reducing the digital gap, ease access and integration of ICT in school and university systems (ICTMP, 2018).

Similarly, the education policy of Nepal (2019) has aimed at producing competent, skilled, and tech-savvy human resources to meet the goals of 'prosperous Nepal Happy Nepali for prosperity by strengthening education via the availability of good access to the internet with solid infrastructure and provincial and central government to assist in this regard ensuring provision of e-library, virtual labs, virtual classroom, e-portfolio, ICT in teaching plan, development of teaching-learning tools and effective implementation. Further, it has provision of mentor teachers to assist novice teachers in supporting teachers' growth by promoting ICT in education. It has been stated that the goal is to create a supportive and conducive environment for elearning in National Education Policy 2019 (MoEST, 2019). Likewise, to cope with COVID-19, many institutions urged to adopt online education as per the Ministry of Education Nepal's recommendation of the guideline on 31st May 2020 to ensure teaching and learning (MoEST, 2020).

#### **School Education Sector Plan**

Recently, Nepal implemented a School Education Sector Plan to strengthen quality education and pave the way for lifelong education as targeted by the 2030 agenda. It's trying to make education inclusive and stresses the adaptation of new pedagogies, helping teachers adjust to the new and emerging context. It has also stressed the education sector's newest and most widely practiced new pedagogies. (SESP, 2022/23-2031/32). It has furthermore highlighted providing new professional development training to secondary-level teachers to award them pedagogical competencies, as university degrees cannot give them such competencies.

Moreover, it has kept its stress on providing sound ICT skills both to students and teachers, has a plan to set up ICT infrastructures, and has even gone for a central digital learning platform. (SESP, 2022/23-2031/32). Because of all these provisions, teachers must have been going for this sort of technologically enhanced learning, like a flipped classroom in our context. During the literature review, the ICT in Education Master Plan (2018) and the Education policy of Nepal (2019) compelled the use of innovative teaching methods and flipped was one such kind. Thus, this plan has welcomed the presence of new and innovative practices and helped to address constructivist teaching pedagogies, including flipped learning.

Teachers' Professional Development Framework (TPDF) of Nepal (2017) went for Project-Based Teaching PBT and Problem-Based Learning (PBL). It has stressed innovative teaching, all of which are in some way connected with the fundamental concerns of flipped learning methodology; for example, teachers are expected to develop projects for students, and if they use flipped learning, the effectiveness of problem-based learning will be further enhanced because students can be engaged in online and offline activities Likewise Teachers Professional Development TPD curriculum for secondary level teachers has also allocated three sessions for empowering teachers on student-centered teachings like integration of innovative pedagogies like problem-based learning and lab-based teaching (Teacher Competency Framework, 2016). This framework has further stressed the development and the provision of the newest pedagogies (TPC, 2016).

Furthermore, the National Curriculum Framework of Nepal (2019) stresses contemporary classroom teaching practices for strengthening the learning of students. Flipped learning could be one such pedagogy teachers implement in their practices as it incorporates projects and problem-based learning in offline and offline modes. It has stressed the quality of education through changed teaching methods. Likewise, SSDP (2016-2023) also stressed changes in teaching methods and the integration of innovative methods for focusing on student-centric teaching pedagogies, and flipped teaching is also one such kind, though it's not mentioned directly. It has also gone for strategic planning to break from the long practice of traditional teaching, which continued for a long time with a major focus on student-centered teaching practice with innovation. There is no definite policy to address the flipped classroom in particular, but many policies have indirectly addressed this concern.

More specifically, all the policies, including Education for All (EFA) by 2015, School Sector Reform Plan (SSRP), 2009-2016, School Sector Development Plan (SSDP) 2016-2023, Basic Education Curriculum (BEC), 2012, National Curriculum Framework for School Education (NCF) 2007 and 2019, National Education Policy (NEP) 2019, SDG 4: Nepal National Framework (NNF) 2019), Education Sector Plan (ESP) 2021-2030 have contributed for these achievements (Ministry of Education, Science, and Technology, 2019) have directly and indirectly touched upon this area as they have highlighted the student-centered teaching, innovation in teaching, elearning, teachers competency in ICT integration. Most importantly, ICT integration is considered the best approach and method for flipped classrooms, as flipped classrooms demand ICT use in particular.

With these provisions, there have been technological adaptations and E-Learning portals throughout the schools, so teachers have gone for flipped learning, and I am keen to address their experiences and narrate their mini-narratives on technology-friendly flipped learning. While reviewing the existing plans and policies initiated to address and improve the education sector in Nepal, they are found to have directly or indirectly focused on innovative pedagogies and their integration in the classroom. So, it is also relevant to explore flipped learning from the policy perspective.

#### **Research Gap**

With the expanding use of digital learning methods, flipped learning has become a buzzword, and active learning is today's demand for longevity (Canaleta et al., 2014). Several studies reviewed above revealed that flipped learning offers increased involvement of learners in the instruction process. Going through the literature, this study identified methodological, evidentiary, theoretical, empirical, and practical knowledge gaps in Nepal as a comprehensive study focuses on how flipped learning has been perceived and practiced in Nepal's secondary school classrooms. In other words, the practice of flipped learning in secondary schools in Nepal has not yet been adequately documented by research, although some studies have been done in this regard (Koirala, 2021; Sharma & Poudel, 2022). I found little evidence of a qualitative approach in flipped while going through the literature and very little in our context.

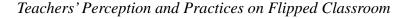
There is a methodological gap as well. For example, a large number of studies in flipped learning have been found to be done in quantitative design (Birgili et al., 2022). In this case, I aimed to contribute to this field as a qualitative perspective would add to the existing knowledge base. There was an urgent need for qualitative research and narrative inquiry to know how teachers narrate their stories based on their perceptions, practices, and experiences concerning flipped learning. Although progress has been made in implementing technology-enhanced learning in schools, supported by the government system, much has yet to be done in practice, especially in this post-COVID time.

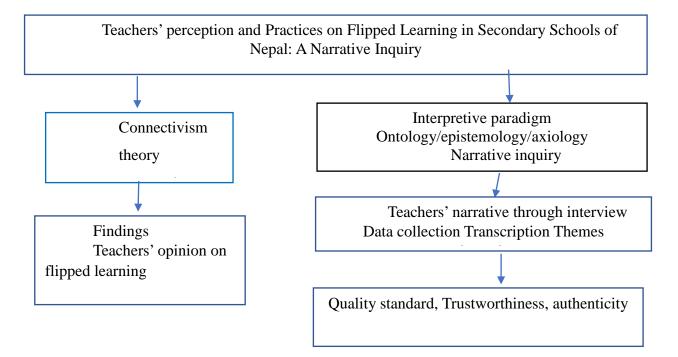
The government has just made provisions for e-learning and ICT in education. However, I noticed that the stakeholders such as parents, teachers, and administrative officials are not informed of the current demands and developments regarding flipped learning; while visiting the literature, the teachers' narratives are not found explored in. our context, and it's required to explore and know what's going on and what is required to do since Nepal has stressed innovation in teaching by integrating (SESP 2023-2031/32).

Moreover, there has been a rise in the trend of educational institutions integrating technology into education at large. However, while reviewing the literature, I found that there are more positive concerns about flipped classrooms inside and outside, though there exist some drawbacks to this methodology, as reported in the literature presented above, concerning online learning (Smith, 2015). On top of that, schools are not prepared to fully implement this learning method due to several constraints, such as resource management and so on (Shrestha, 2021). This scenario prompted me to explore the issue of flipped learning; drawing on the qualitative data obtained from teachers regarding their perceptions and practices in their classrooms, I started collecting narratives of teachers of secondary level about their perceptions and practices of flipped classrooms in the Nepalese context. I am more concerned about this issue as exploration of this issue will give new horizon to Nepal educational institutions to adopt new and fresh educational pedagogies as they are marching fast by adopting technology in teaching-learning activities with higher expectations of its contribution in making the schools different and have new drive in this competitive world of education. The main gap is the practice gap. So, this is also projected to help teachers and students ease their teaching and learning process and raise educational institutions exclusively with performance excellence, opening the door for rethinking policies.

# **Conceptual Framework of My Research**

# Figure 3





As mentioned in the frame, I began my study with the introduction and models of flipped learning, with some literature backing up the teachers' perceptions of flipped learning. I used connectivism theory and the theory of constructivism to blend my study and teachers' perceptions in support of my argument. Some literature was blended in the third section, and I talked about methodology. I used the interpretative paradigm as I am interested in exploring varied realities of the teachers. For knowledge generation, I kept very close contact and interaction with them and was the influence of the researcher and the participant's values in the research, as my axiology is value-laden. I presented the narratives of my teachers as I have chosen the narrative design as my research approach, and the third section covered my methods of data collection, and in the fourth section, I showcased the findings of the study.

# **Chapter Summary**

In this chapter, I presented the review of literature based on different themes mentioned above concerning policy context, theoretical lens, and other theme-based empirical reviews in an orderly manner. I started with the theoretical lens and concluded with empirical studies while carrying out the research sequentially. First of all, I put connectivism as a theoretical background and constructivist theory to provide coherence and guidance for the entire research, followed by online learning, flipped classrooms, and digital technologies, and outlined the empirical review concerning flipped classrooms. Next was perceptions of teachers in the flipped classroom as a pedagogy to support my exploration of the gap in this field. The final presentation was of the conceptual framework of my research, which figuratively presented the entire process, showing the order of the incidents and steps followed, including the research domain, design, methodology, and findings process, systematically.

# CHAPTER III RESEARCH METHODOLOGY

This chapter outlines an overview of the Paradigm, philosophical considerations, and my research method. Likewise, it presents the unit of analysis, field or site study sample, data collection methods, the procedure of data collection and analysis process, and quality standards with ethical consideration for my research.

#### **Philosophical Foundation of Research**

As per my understanding, philosophy is the abstract viewpoint of the reality that my research presents. It directly impacts different aspects, starting from topic selection, stating the research issue, framing the research questions, purpose of the research, fixing of paradigm, and the approach of the research (Creswell, 2014). In this research work, I have considered the subjective realities concerning the perceptions and practices of the flipped classroom in Nepalese. I have compiled varied stories of teachers teaching at the secondary level in Pokhara and Kathmandu. **Ontology** 

I intended to explore subjective reality as it might be influenced by the gender, ethnicity, and socio-economic condition of the participants as their experiences are to be influenced by the different phenomena. There isn't a single reality, as my participant's context, space, and time contribute to different perspectives. Concerning ontology, Heidegger opines on the concepts of ontology in-depth, stating that the aspects of ontology are contextual, and meaning-making is a difficult endeavor as of the context and space. (Heidegger, 2008). The ontological belief solely lies in multiple realities, as my participants' experiences are affected by the situation to which they belong.

In the attempt to explore teachers' experiences on flipped learning, my ontological pivotal points strike upon an exploration of multiple realities of my participants that is to guide me to reveal the teachers' stories, particularly how they practiced and perceived in terms of flipped learning or flipped learning related to students' engagement, motivation, and I am fully convinced that people perceived differently, and their experience is guided by the environment they exposed of. So, in my research, I reached every participant through sharing and close interaction, which involved multiple interactions and exploration of multiple realities. In support of this, I hold my standpoints on the ideas laid forth by Cohen et al. (2011); for them, ontology is all about studying beings and the nature of the reality they are exposed to or live with. As mentioned earlier, my ontological assumption is that my participants had subjective realities, understanding, and perceptions. Denzin and Lincoln (2005) disclose that ontology is the garland of some ideas and a short and comprehensive framework. It differed in different situations or as a variation.

## Epistemology

As I have stated, multiple socio-cultural events, economy, ethnicity, and lifestyle are weaved to exist all around, and as per my ontological standpoints, the epistemology of my research is based on interpretivism. Weber (1949) suggests that social realities are constructed through subjective meanings and interpretations respecting unique opinions and perspectives. I garlanded this to see the world from multiple lenses where they belong and live. It clearly says that the postmodern notion of respecting epistemological pluralism referring diverse stories. According to Creswell (2014), epistemology is concerned with the interaction between the researcher and the subject of study. It's about the researcher and participants' relationship and their viewpoints and, of course, realities. I made close contact with the participants' lives and tried to feel their feet in their contexts. So, having intimacy with the participants was useful in exploring multiple and subjective realities to the fullest extent. The ' world is diverse, and the reality is different because of varied understandings of the phenomenon.

During this journey, I valued the knowledge of my research participants, and they were respected. Space was provided for multiple states of knowledge of their context. The knowledge was created having stood on their experiences, my observations, and made interactions. To complete this journey, I conducted interviews and interacted with my participants to explore their in-depth understanding of flipped learning. Concerning perception and understanding of this journey, they learned more interactions and lively dialogic conversation or interaction with the teachers in collaboration as per their convenience. I have maintained deeper, closer, and prolonged engagement with them. I paid due attention to every individual's way and knowledge as everyone is simply unique and multidimensional in nature and dealings. I explored and tried to interpret teachers 'experiences through an in-depth interview in their school context as I am for the point that knowledge is to be contextual and a result of collaboration and coexistence. As Cohen et al. (2011) go with it,' epistemology is different forms of knowledge and nature that are being generated and communicated through interaction. It is all about how I know and what I know (Kafle, 2013). So, together, I blended my and my participants' different stories, keeping stands on the interpretive paradigm and having justice to it.

## Axiology

I have my own ideology and perceptions of different things, and matching them with others is unnecessary. What I value is different from others. The theory of value also underlines that ethics and human judgment are met. The world is diverse, and people live based on the values they preach. So, research also traces out the role of value as a crucial element in generating meanings. In the context of interpreting and unpacking the perceptions and stories teachers share, I found that they have different values and are influenced by the values of the participants and the researcher. My values are different, and my participants' values do not necessarily have similarities with mine. I have understood that valuing the participant's voice was the crucial move, and I remained neutral in this regard as I said, "For the relational being there is inside versus outside, there is only embodied action with others" (Gergen, 2009, p. 138). There is a role of value in the research, so my research is value-laden. I tried to maintain interconnections between my values and those of my research participants, which is crucial, as stressed by Cohen et al. (2011). Axiology is all about human nature and the relationships they develop in the environment in which they dwell (Bahm, 1993). Using a lens of narrative research, I understood the intense bond of values by valuing the participants and being adjusted within the context, and I helped them with new insight and knowledge generation by having them open up deeply. I valued their life, settings, and experiences fully. So, the axiology of my research relied on knowing every pain and every step of my participant's stories in the course of dealing with flipped learning, and their emotions of happiness, surprises, adversities, and agonies are kept into account. Keep them at the center throughout the entire research journey. I valued the multi-dimensional realities of my participants.

# Interpretivism as My Research Paradigm

Interpretivism is the paradigm that my research has garlanded. Considering my expression of the ontological, epistemological, and axiological expressions above. The central belief scheme or perspective that always governs the study is called a paradigm. (Guba & Lincoln,1994). Interpretivism is always found to be stressed in the

participants' daily life narratives and the activities they take and adopt in their external world. Interpretivist is always confined to better comprehending the experiential sphere of real existence (Cohen et al., 2011). I also tried to explore the real-life experiences of my participants where they belong. Interpretive research is always considered a very practical area of research.

Interpretivists advocate for relative reality and lie on multiple strands. The core belief system or worldview that has guided the investigative process and is to guide the researcher thoroughly is referred to as a paradigm (Willis, 2007). So, going with this belief, my research paradigm streamlined the subjective realities of teachers' experiences with flipped learning. Every single participant is known and explored indepth, and they differed in opinion and had different sharing and different things to share. The interpretive paradigm advocates multiple meanings and realities of the selected participants, and it values the social construction of realities. It is contextual as participants generate realities in a social setting and context of their own.

Thus, I relied on the interpretive paradigm to support me in this regard, connect and reach out to my participants, and collect their different stories regarding their flipped learning experience in secondary schools. Nepal, mainly the public and private schools (NEP, 2019), is a progressive school modality. I chose it as qualitative researchers are to explore and unwrap social phenomena and value perceptions and feelings of the participants selected entirely, which is reflected in the work of (Lodico et al., 2010). Likewise, interpretivism is more subjective, as further opined by Thanh and Thanh (2020), "Interpretive researchers do from subjects, typically from people who own their experiences and are of a particular group or culture" (p. 25). So, I closely investigated my participant's knowledge using in-depth interviews and was concerned about their behavior, way of living, and beliefs they presented in the form of narratives. Therefore, I have used the basis of the interpretive paradigm to analyze the findings of my research and to narrate the stories of teachers for contextual meaning. I wrote and recorded the narratives of my participants and interpreted them based on the idea systematically presented by interpretivism.

# Narrative Inquiry as a Research Design

Narrative inquiry is a research design that allows participants to systematically and chronologically explore their life experiences in a detailed and profound way. Narrative inquiry is largely used for blending stories and developing grand stories. As per Connelly and Clandinin (2012)." Humans are storytelling organisms, who individually and collectively, lead storied lives" (p. 2). In particular, I have used the personal narratives based on my participants' use of flipped classrooms. I adopted oral history narrative inquiry as expressed by (Germeten, 2013) as I am to explore the reflections of my few participants on their opinions and experiences of flipped learning concerning how they come to practice by connecting their past and future stories of flipped classrooms.

I have used some artefacts representing the practice of flipped learning, like smart boards and laptops, for collecting data, so there is a slight use of visual narratives, too (Germeten, 2013). I relate stories with artefacts. Also, I have adopted narrative inquiry as my participants have different stories, and their stories are determined by the setting and context to which they belong. So, I used this study design as it's very helpful in bringing out rich and thick data (Denzin & Lincoln, 2005) data on teachers' experiences of flipped classrooms based on the context of their experiences. It is crucial to unfold the participants' stories and blend them for triangulation, as expressed by (Creswell, 2014). Likewise, Noble and Heale (2019) triangulation is the process of increasing validity and credibility in research. So, I ensured all aspects of triangulation throughout the research by blending participants' stories with theory and literature. Denzin and Lincoln (2002) shared that the study is highly trustable if it brings rich and thick data on the issue being explored. I have set out to explore the individual stories of teachers about their perceptions and practices of flipped learning. I used it with the narrative inquiry to ensure credibility. Participants in a narrative are said to be tellers of tales. Going with the nature of my research paradigm, I am for the qualitative method as my research approach. My main goal is to tell the story of teachers on 'flipped learning regarding students' engagement, motivation, and interaction, and their practices and experiences to have adopted narrative inquiry as the pivotal approach to my research. According to Creswell (2009), the qualitative approach has been adopted to understand further and examine the ideas of numerous individuals or groups of personalities about a societal or human concern. With the affirmation of a qualitative approach as my guide, I have learned more about what, why, and how my participants behaved, reacted, expressed their thoughts, and constructed meaning as they are anticipated in the flipped classroom.

I am exploring how the participants who are being studied understand and interpret their reality naturally about the practices and perceptions of flipped learning. I was keen to understand the meaning my participants construct, which is how they would make sense of their world and the experience they have collected and practiced. More specifically, I attempted to explore the meaning by interpreting my participants 'understanding, values, experiences, opinions, and behaviors as their sole participation. As narrative is always intended to unfold and generate meaning, a fresh method of investigation is constantly required (Barrett & Stauffer, 2009). This is to unfold how people see or experience the world and are exposed to being based on their own stories. The study of stories, narratives, or representations of a series of events is something that all scholars have in general in the narrative. So, I'm taking it as a design to narrate my participants' stories in detail and to unravel their extremely particular story experiences as narrative inquiry is to reveal details about people with their lives and the way they narrated their tales.

As described by the authors, narrative inquiry is a commonly used strategy for systematically collecting, categorizing, and analyzing data received from various sources using various qualitative methods. Narrative inquiry is a word used to capture personal and human experiences over time, and it is always concerned with the interaction between individual experience and the participants' cultural context (Connelly & Clendinin, 2012). As an outcome, using narrative inquiry as a tool in my research design, I valued the stories and reflected on their experiences as both equally add value to my research.

"Narrative inquiry brings storytelling and research together either by using stories as research data or by using storytelling as a tool for data analysis or presentation of findings." (Barkhuizen et al., 2014). I have also presented research data while blending stories, interpreting them, and in the meaning-making process. Narrative inquiry is broadly accepted as a way of understanding and inquiring into the experience of the participants through "collaboration between researcher and participants, over time, in a place or series of places, and social interaction with milieus" (Clendinin & Connelly, 2000, p. 20). I have also closely reflected on their stories, paid much attention to the verisimilitude, and critically looked upon everything to do justice to this narrative inquiry, as this is very crucial in the narrative study. At last, I realized that this is a journey of research and creating stories of participants based on their experiences.

#### **Selection of Research Site and Participants**

Selecting the study site is a key task in research. My study was centred on two different cities, Pokhara and Kathmandu. I selected four elite Schools, public and private, with the concept of good infrastructures and elatedness purposively for having rich data as opined by (Patton, 2002). I selected them as I knew that they were high-tech schools that had practiced flipped learning in the past. I got to know from professional learning communities. I intended to unfold the experiences of teachers concerning perceptions and practices they have in flipped classrooms. I selected them because I knew that these schools had flipped learning as they were technologically advanced, and they were found adopting flipped learning in the COVID-19 period. So, I finalized the participants from the elite and established schools in two cities: Kathmandu, the capital, and Pokhara, my hometown.

I purposively sampled participants from each school, including one female teacher, to meet many participants for data saturation and to maintain diversity in perception and practice. I purposively selected secondary teachers teaching from 9-12. I chose them at my convenience as they are cost-effective and are the most general form of sampling in qualitative research, offering flexibility in determining the sample size (Lopez & Whitehead, 2013). I used purposive sampling as it is used to reach people with distinct knowledge, especially in their specialization and more scientific way (Patton, 2002). The reason for choosing secondary teachers is that they mainly go for a new trial. Generally, teachers teaching in secondary school are much more aware of their professional growth. As Cohen et al. (2011) explain, Purposive sampling is named after the fact that people choose according to their preferences, and it's one of the most commonly applied. I have chosen them to stick to my research questions and hope that they will meet my expectations, contributing rich data relating to their experience. Here, I present the short profile of my participants.

Four teachers teaching at the Secondary level in Pokhara and Kathmandu participated in this research. I purposefully sampled them as they are the teachers of some elite (in terms of infrastructure in schools and source of income), and public schools in Pokhara and Kathmandu could easily access them, and I was even aware of the school practices. I kept my ease also the priority as Pokhara is my hometown. Each participant provided their curriculum vitae, using their personal information for my convenience. I was involved in multiple rounds of interviews lasting fifteen minutes first and thirty minutes. The rest of the interviews were scheduled online at their convenience time. Their class of forty minutes was observed for collecting the horizon of their practices.

Participants' demographic and background information, including professional experience, followed by a short sketch of each profile. Participants' resumes and some hints from the interviews helped me to get educational and professional experiences. Their interview gave them more in-depth ideas about their origin, educational attainment, caste, place of birth, the language they speak, gender, and marital status. I have listed their information in a table.

#### Table 1

Participants' Details

Name of	District and	Educational	Teaching	Age, Gender
Participants	Caste	Attainment	Experience	and Marital
				Status
Shalin, Math's	Dholakia,	MSc. MPhil	14 years	35/male/married
teacher	Brahmin			
Raju, l,	Kaski,	MA. MPhil	20 years	40/male /married
English	Brahmin	running		
Teacher				
Sam, science	Kare, Newar	M.Ed. /MPhil	13 years	36/Male/Married
and computer				
teacher				
Medhavi,	Parbat,	MA, Bed	22 years	42/Female
social teacher	Brahmin			/Married

I developed their stories based on their context and social background and had respect for their reality based on the interview and post-observation interview. All the stories were generated based on prior follow-ups, rounds of physical in-depth interviews, and intermingling of our bondage and mutual sharing during the interview process and developed relationships as stated in the work of Kin (2016). Likewise, the narratives of my participants that I am presenting below are developed and joined from collaborative stories that the participants share, and the researcher blends by probing, which is reflected in (Clandinin & Connelly, 1994, p. 12). The narratives were collected during June and July of the year 2023, and I also made some telephone follow-ups in case of confusion. Some more details were taken when required. I organized the narratives of my participants based on my research question: How do secondary-level teachers perceive and practice flipped classrooms? This chapter addresses the perceptions and practices of teachers in flipped classrooms in order of the five participants.

## **Data Collection Procedures**

Collecting data and information is the most important task and behavior that must be considered in research. Because of inappropriateness, we may be misled. So, using the right tool is mandatory. Therefore, before going into the field, I prepared the interview questions to guide me in the interview process. I finalized my questions with the help of my supervisor and mentor, which was of my own ease. Then, having rooted in purposive sampling, I visited elite public and private schools in Kathmandu and Pokhara to determine their appropriateness for my study. My concern was to explore the practice of flipped classrooms in their schools and to unfold their perceptions. As luck favored me, I could find the participants in my proposed schools. I purposively selected English, Mathematics, Social Studies, and Science cum Computer Science teacher representing four different schools for my research. All of the teachers were secondary level and were established teachers of Pokhara and Kathmandu with a lot of experience. I obtained their consent for all the information I collected from the observation and interview. Their cooperation was praiseworthy, and I kept ethical considerations. I did not harm them, and every aspect was valued. I maintain inclusiveness in gender as my participants were three males and another female. I limited myself to one female as I couldn't find more having it a practice, so all of them actively got involved in the activity I carried out; true and first-hand data were collected, and they authentically presented. I recorded their stories on obtaining consent; transcriptions were prepared and analyzed when required. All the recordings are kept safely and properly stored.

For primary data generation, I used interview and class observation techniques as per my requirements. It was done as it was important to interpret the information and provide and know the participants. Likewise, I used some of my field notes and notes I developed in every meeting. I used interviews and observation to generate the data for this research.

It was necessary to identify the personal and extremely professional experiences relating to the stories of the teachers, having founded on their stories on the doorsteps provided by my ontology, epistemology, and research paradigm. The qualitative research paradigm has served as the foundation for my intended research. As a result, to meet the research's stated objectives, as suggested by Denzin and Lincoln (2011). I used detailed, rich, and in-depth data drawn out from a range of sources. Other researchers have devised various methods for gathering qualitative data from various sources, including in-depth interviewing, direct observations, and group discussions. For this, I have used a flexible, informal, in-depth interview with a prior listing of some open-ended questions linked with proposed research questions. **Fieldwork** 

After defending my proposal, I began fieldwork and got accurate and reliable data. Proper rapport was built before conducting interviews. All centralized authorities, including local bodies, were alerted in advance. I adopted the gatekeeper strategy, as described by (Bell, 1997), to receive consent ahead of time for possible research advantages, satisfy the standards that qualitative research demands, and maintain an amicable relationship. I went for it as it's the best way to get data, as presented in (Cohen et al., 2011). I maintained flexibility as per the choice of the participants for mutual benefit as Clandinin and Connelly (1994) assure that "the techniques (in terms of behavior, questioning, and response) used by the interviewer determined the relationship between interviewer and participants and had an impact on the way participants responded and discussed their experience. Before, during, and after my fieldwork, I had a good relationship with the participants and concerned gatekeepers to ensure that authenticity was maintained.

## **In-Depth Interview**

In comparison, the in-depth interview is the most common data collection strategy in research because a trained interviewer conducts the interview (Kvale, 1996). I have used flexible, informal interviews, listing a few questions informally and having open-ended flavors blending with the research agenda. Three interviews were arranged in their workplace and when after obtaining their consent. Besides this, I made some Zoom meetings and phone calls in case of confusion, and interviews were conducted between June -September 2023. AD I used this strategy to collect rich data by deeply inquiring about the teachers' experience of flipped learning and its relevance, considering students' level of motivation, engagement, and interaction in answering purposed questions. I blended my fresh experiences and memories with the data I derived from the participants. I did so as I also belong to the same profession, and my stories can contribute to developing grand narratives

## Observation

Observation is one of the methods widely used in data collection techniques to find out the reality of the participant's practices. Observation provides real, grounded information about the scenario we are thinking of as we can witness the real scenario. Regular observations and informal interactions were arranged with the teachers for more concerns. I observed their one full class as a silent observer. And I have kept a record of my intense observation of everything they do. I did it all as it is required to collect data in observation burrowing ideas (Ciesielski & Bostrom, 2018). Likewise, in research, I used observation to pursue my passion only through observation only. I adopted it as I wanted to receive information firsthand as observation is a task an investigator takes as the opportunity to collect. It's a mandatory task in narrative inquiry, and rich and real data can be collected from naturally occurring social situations, as opined by Cohen et al. (2011). At the same time, I have kept an account of the available tools like smart boards, laptops, audio-video materials, display boards, multimedia, etc., as artefacts for the collection of rich data. So, I used observation as one of the methods in my research to get more data on the practice of flipped classrooms in Nepal. I observed one class of each participant to see the practice in the post-COVID period and also linked upon their experiences of virtual classes while sitting for post-class observation interviews. For it, I took both verbal and written consent from teachers and authorities concerned with the schools.

#### Table 2

First Visit	Second	Third Visit	Phone Calls
	Visit		and Meets
June 2023	July 2023	August 2023 and	When
		September for final	required with
		round zoom and	consent
		calls if needed	
June 2023	July 2023	August 2023 and	When
second week	second	September second	required with
	week	week and as per	prior
		need	conversation
	June 2023 June 2023	VisitJune 2023July 2023June 2023July 2023Second weeksecond	VisitJune 2023July 2023August 2023 andJune 2023September for finalround zoom andJune 2023July 2023August 2023 andsecond weeksecondSeptember secondweekweek and as per

## My Field Engagement History

#### **Data Analysis and Interpretation**

As narrative study has different dimensions and one size doesn't fit all (Creswell,2009), I ensured different dimensions by collecting the data in a natural setting relating to unfolding their lived experiences as concerned with the individuals' time and space. I did it to make my research trustworthy, as said by Connelly and Clendenin (2006), who stressed that the real data could not be unfolded without meeting the context and natural atmosphere. In this study, the stories of teachers and researchers are combined and co-constructed based on the experiences and perceptions of teachers. A consistent link is made to link teachers' narratives with the different theories and literature, and misleading information is omitted while proceeding with interpretation and meaning-making (Mitchell, 2016). The interviews were arranged multiple times until data saturation or until evidence was sufficient for meaning-making. Guided by the purpose questions aligning with Coughlan (2009), simple and welcoming questions were put forward, including the demographic status of the participants.

I did a thematic analysis (Barun & Clark, 2006) that was solely based on participants' own and real personal experiences shared. The researcher did the second interpretative review when required to avoid confusion and provide a systematic essence of the stories. I recorded interviews or prepared notes with prior consent from the participants and carried out multiple phases of writing or collecting data via interview and observation to ensure validity as "lead to more valid reliable and diverse construction of realities" (Dadi, 2009, p. 71). I did filtration of data as stated by Cohen et al. (2011): "Qualitative data analysis involves organizing, accounting for and explaining data; making sense of data in terms of the participants' definitions of the situation, noting patterns, themes, categories, and regularities" (p. 461).

I filtered data in different steps and minted naturality as required (Azevedo et al., 2017). Theme generation and their meaning-making were guided by keywords framed questions that my research raised. I applied categorized coding and decoding and finally generated themes. In Creswell's words, a 'family of themes with children was formed, and analysis or meaning-making was done based on the sorted themes; in this regard, I analyzed qualitative data collected from various sources by the individual, by group, by issue, by research questions, in a detailed way. From the

interview of four teachers, I developed the initial and raw 'nodes 'and finalized them later by finding relevant groups and doing thematic analysis at large (Riessman, 2008). Since this research adopted a narrative inquiry design, data were analyzed based on research questions and their proper triangulation.

I blended the stories of my participants in different time frames, including description, analysis, and interpretation (Wolcott, 1994, as cited in Creswell, 2007), and thematic analysis, as discussed by (Clarke & Braun, 2017), was adopted smoothly having the support of literature and blending with theoretical basis as purposed.

## **Quality Standards**

Specifically, the quality standard is how readers can adequately and consistently relate the truth's existence and the researchers' role in research. In this connection, the way how teachers have perceived and practiced flipped classrooms is to be accepted and believed and should have been practiced in the classroom without a second thought. To stress quality in research, the researcher needs to address or value the theoretical underpinnings used in research thoroughly, connecting empirical findings, adopting appropriate methodological stances, and have the lens of the practice and policy level (Silverman & Mar Vasti, 2008, as cited in Loh, 2013). For instance, in unpacking meaning from the data from my research participants about the perception and practices of the flipped classrooms, it remained essential to follow the standard of quality in every aspect without any derivations or modifications. As narrative inquiry demands common places that include sociality, temporality, and place (Clandinin & Connelly, 2000), I ensured the quality of my research from the beginning to the conclusion of the meeting. I worked extensively to do justice to my research agenda. My stand is on qualitative research; more specifically, I fully stuck to the narrative approach. I tried hard to bring real, fresh, and rich data from the field to validate my research.

## Temporality

Due concern was given to the participants' availability of time and situation, consent was taken in advance, and a series of interviews were conducted. I did so as events in the study are temporal transitions and maintained a cordial relationship. There were no grudges between my participants and me regarding their availability of time in formal ways for bringing the real data. I unfolded their places, events, and stories of past, present, and future in a sequential manner.

## Sociality

To ensure this, I take my personal and participants' personal conditions seriously. I respected their emotions and had value in their condition. No personal harm is made. I value their emotions and experiences as per the context and environment in which they belong, and I was also aware of mine. Much respect is given to the participant's personal, cultural, and social well-being as well as their condition (Connelly & Clandinin, 2009). I respected their place; I happily reached them at their available places and valued their concerns for doing justice to narrative inquiry. I also aligned with their emotions and feelings in specific situations, adding approvals.

## Place

Connelly and Clendenin (2006) define place as the "specific concrete, physical and topological boundaries of place or sequence of places where the events take place "(p .481). I valued my participants' places and reached their convenience in their own context and place of availability. I also kept an account of places I visited and collected some artefacts available with consent for developing stories. I acted according to the situation of the palace and accepted the setting of my participants, too. Thus, the stories and responses of my research participants were considered very honestly for making this research succeed successfully. Hence, to maintain trustworthiness in teachers' perceptions and practices, I duly attest all aspects of quality standards.

#### Trustworthiness

The task of making the qualitative research work worthy of belief from different perspectives is what trustworthiness intended to speak. To ensure the trustworthiness of my research, I took standpoints on Lincoln and Guba's (1985) trustworthiness criteria and techniques, which include assurance of credibility, transferability, dependability and confirmability for making my research more trustable and doing justice to qualitative research. It is rated based on participants' and researchers' repeated engagement, conversation, collected information, and depth of the data and relationship presented.

## Credibility

While talking about credibility, Eisner (1991) states that" we are looking for a cluster of information that nurtures trust, allowing us to be sure in our findings, analyses, as well as judgments." (p. 11). I have tried to maintain credibility as

expected. I selected the participants who practiced flipped classrooms, and schools were selected because of their progressiveness and elatedness with access to technology to ensure real data. The narratives were prepared based on field notes and reflection on the scene (Given, 2008). Information was collected from teachers who practiced flipped classrooms, engaged in bringing rich data, and persistently observed the scenarios where I collected data.

I ensured data triangulation by blending them with the literature and theory I have used, which are also aligned with my experiences. To develop credibility, I thoroughly transcribed their interviews and blended real stories based on their own narrates. I developed stories by transcribing their stories, which I collected from interviews and post-observation interviews and quoted some of the spontaneous experiences teachers have expressed. I used multiple sources of data for triangulation and confirmation of their stories. (Lincoln & Guba,1995). The interpretive paradigm speaks of having a match between the participant's stories and the realities that other concerned stakeholders represent (Guba & Lincoln, 1985). I did justice to their constructed experiences of the flipped classroom and the way they practiced and perceived to explore and rate the present practices of flipped classrooms in Nepal by secondary-school teachers. To ensure credibility, I valued their spaces, perspectives, and sole experiences; as Dahal (2023) says, without knowing participants from different lenses, no credibility is ensured, so I also did member checking for further credibility.

#### Transferability

I have maintained the notion of transferability by compiling and collecting detailed descriptions of my participation to interpret while writing this work. I valued their contest and unfolded their stories in depth, which were more informal and less structured. I have opened the doors for other researchers to value my research and make my conclusions drawn to start their new journey in different aspects and settings. For instance, the information, conclusions, and stories collected from teachers in Nepal who have practiced flipped classrooms have intentionally been transferred to other aspiring teachers as the settings of my research participants, and their context and experiences might be applicable in other settings too. In this connection, this research can be transferable to others, including my products or outputs, and it can increase my level of awareness about the flipped classroom and its effectiveness in the Nepalese context at the school level. I tried to present a thick description for ensuring quality.

#### Conformability

I ensured conformability by rechecking the transcriptions that I recorded, transcribed, and blended and deeply rooted in them. Their context and personal life were kept into (Guba & Lincoln, 1989). I sent a copy of the synthesis composite textural and structural descriptions to maintain the confirmability and validity of the research. Finally, the narratives of my participants were confirmed and validated for the exploration of perceptions and practices of flipped classrooms in Nepal. To ensure quality, I went for self-reflection and kept my beliefs and biases away without influencing the research. I maintained it for the balanced research, ensured stability in findings and interpretation, and even reached a conclusion without any modifications or biases. For authenticity, original and natural features were continued. I looked for lively detail to bring raw, fresh, thick, and valid data from the participants' lived experiences, linking past, present, and future transitions systematically. I also consulted some reflective journals to make my method and work, which I carried out to ensure my presence.

#### Dependability

To ensure dependability, I carried out an inquiry audit of my study. I went for self-examining to confirm the different parts of my methods and process of strangulation to ensure how I collected data and presented it for assurance.

## Verisimilitude

I paid ample attention to verisimilitude. As interpretive narrative inquiry analysis focuses on real-life experience, verisimilitude or the real chunk of life should also be maintained and expressed in/through the final work. I kept their seating and their real scenarios and tried to reveal their real stories, having several attempts and closeness, even visiting in informal settings. I also tried to maintain pedagogical coherence so that my readers remained emotionally engaged in my write-up and interpersonal relationships were maintained. I valued the images, artefacts and my reflections on fieldwork, ensuring verisimilitude.

## Meaningfulness

My understanding is that meaningfulness validates that the participants' narratives are crucial to understanding the complex situations to which they belong. As I took a stand on the narrative approach, I searched for teachers' perceptions and practices of flipped classrooms in Nepal. I created their stories in their own natural setting, having meaning contextually. The representation of their voices is ensured and kept as they have shared. To ensure this, I have aligned their narratives to my research questions to find the intended answers, and a chunk of narratives were blended systematically and meaningfully. Their stories are blended coherently and sequentially without modifying their meanings and essence so that my readers can read them in an orderly way without being misled. Equal importance was given to the context, setting, and socio-cultural aspects of comprehending the data context. I have maintained all the aspects of meaningfulness as Smith et al. (2021) have highlighted its importance for doing justice to readers.

Whoever hears the story finds it true because the stories are true, and I have considered them throughout my research. It's a mandatory task in narrative inquiry (Doan & Parry, 1994). I tried to maintain meaningfulness as it was essential in narrative inquiry, meaning-making was essential, meaningfully created stories are valid and authentic, and readers can understand it. My research has presented real stories that are meaningful in the flipped classroom context. On top of that, I was abiding by the meaning-making process that relates literature and data collected and blends them with my experience reflection and theme generation (Visored et al., 2016). I did what I needed to access the field for data collection. A blend of narratives, literature, and my critical interpretation existed throughout the research to ensure meaningfulness. Critical reflections were added to uncover the assumptions that existed and to have multiple layers of meaning as required.

## **Ethical Considerations**

Ethical consideration in a narrative study is the most notable part, as participants are not pressured and can withdraw anytime if they do not wish to continue, as participation was optional. My participants were informed that data collection was done to finish the research process only, and when done, everything would be deleted after the required period of data collection.

As my research participants were teachers, no harm or disturbance was done personally during the entire data collection and privacy process, and their time was given much importance. This is for dealing with every action and activity concerning participants. All the protocol process was done, and I was mindful of research ethics.

Pseudonyms were used in the research transcripts with consent from participants, and the norms of the information associated with the audio recordings of the research were maintained. Principles of confidentiality and anonymity were considered. To ensure the pseudonyms, I gave one title name, looked at their character, and obtained consent well during the reporting of the study results. Participants were allowed to review their transcripts and the final version of the thesis, and even rechecking was allowed for further confirmation, keeping the confidentiality of the research entirely. Participants got the opportunity to recheck their responses. Audiotapes, video recordings, and transcripts were kept in the safest computer for confidentiality and privacy concerns. No clue is mentioned in the transcripts regarding teachers' concerns, and everything was done as requested by the participants. The research product can be used for conference and university requirements only; however, participant identities will be hidden even during those presentations.

The narrative inquirer should attend to relational ethics, and due respect is shown towards it, considering the principles of openness, mutual vulnerability, and care (Clendenin & Caine, 2013). For Clendenin and Caine (2013), "Narrative inquirers need to focus on the ways individual narratives of experience are intertwined in social, cultural, family, linguistic, and institutional narratives". Each inquiry highlights the ambiguities, complexity, challenges, and doubts that the inquirer encounters while living in the field and writing field texts, interim research texts, and final research texts" (pp. 171- 172).

The narrative inquirer and participants have a social bonding in every aspect: "continuously inquire into the social fabric of experience and to not lose sight that people are always becoming" (Clendenin & Caine, 2013, p. 176); from this, all are added one and new lives are formed in general. The relevancy of qualitative research lies in the researcher's judgment and experience, and the information collected is always subjective and varies from individual to individual. Consequently, biases are common and hard to avoid.

In this study, four participants have different contexts, and what fits for one is not the case for others because of the background and situations. Moreover, gender, educational attainment, and setting also affect their understanding. During the dissertation process, I could find myself and relate my personal experiences with many of the teachers' stories, as I also belong to the same profession.

#### **Chapter Summary**

The third chapter presented narrative inquiry as a research methodology, which is the process of the researcher and participants blending stories to implement the meaning of lived lives in a beautiful way. The third chapter outlined the supportive history of narrative inquiry as well as the research methodology in a nutshell. This dissertation's entire process, methods, quality standards, and ethical considerations are also presented. It provided the base for chapter four to present participants' lived experiences regarding the perceptions and practices of teachers in flipped learning.

#### CHAPTER IV

# PARTICIPANTS DETAILED STORIES ON PERCEPTIONS AND PRACTICES OF FLIPPED LEARNING IN NEPAL

In this chapter, I present the stories collected from the research field. There were four participants. They all have different stories in multiple contexts and settings. They have a lot of experience teaching, and each has taught for over ten years. Along with my participants, I have also added short stories for input and interpretation. This chapter outlines my participants' narratives, which were developed through interviews conducted in different settings. All participants' stories follow the order of their birthplace, schooling, higher studies, and their inspiration to join the teaching and the turning point concerning flipped learning and their present situation and plans in order. I followed the chronological standard that the narrative study demands. The subscriptions of participants' stories are followed by researchers' interpretations to provide linkage to chapters v and vi, where I have interpreted and discussed my findings based on the themes of teachers' perceptions and practices of flipped classrooms, respectively.

## **Participants' Narratives and Positions**

In order, I presented the narrative of four participants, Shalin, Raju, Sam, and Medhavi (Pseudonyms). This qualitative study attempted to explore the narratives of secondary school teachers of Nepal teaching in Kathmandu and Pokhara Valley regarding their perceptions and practices of flipped learning. Specifically, I wanted to explore and understand their perception and practices at their level. Here, I am presenting the perceptions of all four teachers on flipped learning based on an interview that I gathered from the notes and transcripts drawn from interviews. The order is Shalin's story, followed by Raju's, Sam's, and Medhavi 's. Then, I presented their detailed stories and made a meaning out of them to provide background to my analysis and discussion, keeping the notion of three-dimensional narrative inquiry, sociability, temporality and space (Clandinin & Collenlly, 2000).

#### Shalin's Story

On a calm and wet morning around 9 am, I left for the interview, as per our pre-scheduled meeting. In the morning, I called Shalin, my first research participant,

and informed him about my arrival at his school. He is originally from Dolakha district. He teaches mathematics in different schools and colleges in Kathmandu. He owned a school at Jorpati Kathmandu, and now he is also taking on the role of vice principal beyond teaching. He is a mid-career professional, very active and smart in his dealings, and has about 14 years of teaching experience in different renowned schools and colleges. When asked about his experience, he was excited and said, 'Do I fit your search Madam?' It was a relief for me, as I hoped that he would share nice stories of flipped classrooms, and I found him very active.

## **His Schooling Experience**

Shalin is originally from Dholakha, but he did his schooling in Kathmandu when his parents moved to Kathmandu when he was very young. He got to study in a good school as he started living in Kathmandu. He studied in the same school from grade one to ten, the East Pole Secondary School. During his schooling, he shared there was no alternative for traditionally practiced teaching besides students being asked to read out the text occasionally and rote learning the content provided. He shared his experience of having been badly beaten by his teacher for not learning the science 'SUVAT' formula by heart. SUVAT is the equation in science: Sdisplacement, U-initial velocity, V-final velocity, a-acceleration, and t-time as supposed. She shared:

"She was rude and slapped me without listening to my story. She was so hard and wanted us to obey what she wished for and preached or used to seek attention for unfinished lectures...on and on" {Fildnotes, July '2023}

While sharing her schooling experience, he shared the experience of being punished when she wanted to share something in class, as students were not allowed to speak, and even student-centred teaching was not there. The teacher was the transmitter of knowledge and was at the front of the class, and students were passive learners and were supposed to listen and do what teachers instructed and demanded to do. His schooling experience suggested there was no involvement of students in learning, but they were passive listeners, which is bad because it was practiced due to a lack of knowledge among teachers. Listening to such a story is quite disheartening since I am a teacher and advocate for students' engagement and direct involvement of students.

He added the story of having been beaten for not obeying what teachers said. The teacher was the master of learning, and the students were obliged to do what they demanded. He said great priority was given to lectures and rotting. He said that he studied the same way up to class eight, and he recalled the memory of the new way of teaching adopted by his English teacher. He shared:

"Our English teacher tried something different when I was in class nine. He gave us some handouts of the play 'Doll's House' in a group priory and asked us to share them in class the next day. It was fun and deeply rooted in my memory. It was later followed by some other teacher, too, up to my SLC." (Fieldnotes, July '2023)

He started seeing the change in his teacher's teaching when he was in class nine, and it continued up to class ten. He shared a very captivating story of a new way of teaching besides the traditional one. After completing his School Leaving Certificate (SLC), he joined another school in Kathmandu to get a +2 in science. As time evolves, there is a slight change in the pedagogies his teachers adopted, which must increase teachers' awareness of pedagogical implementation.

## Higher Study in a Blink

Shalin started his higher studies at NIST College. After joining there, he found some signs of advancement in teaching. He said that for the first time in his life, he saw a teacher using Information Communication and Technology (ICT) while teaching. His teachers used to bring slides and videos, and even teachers used to ask them to prepare such presentations by providing school labs (computer labs). For the first time, he did his homework using a digital platform and found it interesting. He felt some changes in the teaching-learning activities as teachers have started changing the instructional ways, including discussion, questioning, etc., in teaching and the use of ICT. So he then realized that teaching is possible through information communication technology (ICT) or integrating videos and student involvement, but not all classes had projectors, and going to the lab (computer lab for using a projector) was tiring. Here is the short story he shared:

"I started seeing changes in my schools as of advancement in technology, and teachers were using some new ways like audio-videos and discussion, projects and more. I could experience changes when I was in +2 ...."

He told me that after his +2, he joined BSC in Tri Chandra Multiple Campus, Kathmandu. He could feel the change in a classroom setting and teaching methods there. The classroom was student-friendly. Classroom discussion multimedia adoption and the prior distribution of handouts were there. In his bachelor's degree, he could experience some innovation in teaching and the practice of keeping students engaged in class.

He further shared that for his MSc in Physics, he joined St. Xavier College, and he was amazed to see student center teaching and teachers' zeal for adopting new and innovative ways of teaching. He was making a plan to adopt such practices if he joined teaching, such as group presentations, discussion lab board teaching, and more, which were able to win his heart. He further shared that when he joined MPhil Degree in Kathmandu, He found many new and innovative orientation pedagogy needed in this present era. Hence, in his educational journey, he could observe the gradual growth of teaching methods in general, and the more he studied, the more newer ways were adopted.

#### **His Initial Days of Teaching**

Shalin started his teaching at ABC School as a part-time teacher during his MBBS preparation. As for his learning, he started using student-centered teaching methods like group discussion and student-centered teaching methods, which he learned in his plus two classes. He started his further story as:

"I link up my learning with my teaching. I used to allow my students more interactions; they used to prepare and share, and I used to facilitate. It was so exciting that my students started getting 100s in math, and the average was 92. I was highly demanded by nearing schools seeing my performance though I was without a BSc ......" (Fieldnotes, July '2023)

Unfortunately, he was not selected for the MBBS entrance test and continued teaching. He was not affected by his failure in MBBS. However, he did without a Bachelor's degree. He was appointed as a full-time math and science teacher in the same school, and he continued teaching, adopted innovative ways, and kept his students at the center of learning. This experience paved his journey of teaching. After teaching there for two years, he took a break from teaching and continued his education up to MSC in Physics.

#### **Turning Point Regarding the Flipped Learning**

His turning point concerning the use of flipped classrooms is quite good to listen to. He told me that theoretically, he learned it when he was in the UK as a part of the Core Skills (Digital Literacy) project of British Council Nepal in 2016. But he was not sure of how it worked. But when he joined MPhil in 2018. He recalled his memory of the UK and seeing the way lessons were delivered at the university. He shared:

"I call myself a dynamic teacher. I keep on exploring new and innovative ways of teaching, always, if possible, in my context. I go for innovative ways, such as student-centered teachings like group discussion, presentation, questioning, and more. I think students learn when given full authority, and I have witnessed them explore their full potential in learning during my new pedagogy, which is flipped learning."

When asked about his turning point, he shared that he started being an innovation-friendly teacher and that his craze for exploring and trying new pedagogies had forgotten his ease. He shared that the flipped classroom is the result of his search for and engagement in different arenas, as he wanted to be more dynamic. He mentioned:

"During my advanced qualitative research class, our professor assigned one book on Moodle to read and present in a class that particular day. It was 220 pages long, and the book was divided into five parts, and every group needed to prepare their part. I was surprised at the beginning but happy to see the possibility of learning the entire context of the book in a single class via group sharing. This made me recall my UK memories. It was a reawaking class, and then I started the same way of teaching by searching for feasible ways of teaching. I got full support from the school, too. And then came Covid, which forced us to adopt it more. During COVID-19, I explored it more, and now I am happily using flipped classrooms. My students are also happy, and it's been our uniformed practice in our school as students also have connectivity at home." (Fieldnotes, July '2023)

He was interested in adopting flipped learning. He felt that he had done the right task after adapting it, and his school had also made it a common practice. As for a good environment, he did it. He also got a supportive environment and platform to reawake him with this model of teaching. He was happy to contribute to teaching-learning as his colleagues and administration approved it.

Concerning my question about his perception of flipped class when he knew and practiced, he shared this:

"I was overwhelmed when I knew it for the first time during my UK visit. I blindly appreciated it and only had a positive perception of it. However,

when I learned to practice it during my college days, it touched me and gave me the insight to practice it in my teaching. Since then, I have made it a practice whenever and wherever I could fit it. I found it very important as it's student-friendly; everyone is to share and be involved in the learning process. It has further made my job easier as I just need to facilitate. I have found it more beneficial to make them more responsible, as they actively participate in every activity without any grumbling. More importantly, I found their active engagement, and this is what we seek to make their learning sustainable. These days, as of COVID-19, we have incorporated ICT in education and the government's decision of e-learning and innovative pedagogy. We went for it after I visited the UK, and my enrollment in Kathmandu University has shifted my thoughts about seeing this teaching as a pedagogy. I love to practice it as it has touched my heart, and I have realized it is a timely pedagogy and the best fit for offline and online modes these days." (Fieldnotes, July '2023)

After listening to his story, he is more positive in his understanding and has given extensive practice of it in his classroom when feasible. He has been practicing it since he learned about it in his college days and continuously doing it, and now, he is satisfied to adopt it and see his own practice. He also perceived it as a tool to align with government policy.

Regarding my concern about how he assigns homework these days, he reported this way:

"I allow them to read and prepare for their difficulties in advance, providing the videos and content materials as required. This has made it easy to process almost all the lessons they explore on their own. I stopped giving homework after teaching, and I flipped my lessons, making teaching easier. Even students' engagement looked great. I begin my lessons on their sharing, and I only add on the part which they found difficult." (Fieldnotes, July '2023)

After listening to him, I found that he started flipping his class by assigning homework on different platforms. This has been a new practice as they do not perceive it as a burden, and it has been useful in connecting next-day lessons. His experiences of beginning the lessons with their prior understanding of the topic helped him proceed in class and make teaching learning more interactive, though some challenges existed. When I asked him about the effectiveness he saw in flipping the lesson he shared

"In the initial days, I practiced flipped classroom as a new and innovative way to teach as I had not learned much about it. It was the first time I heard about it during the British Council training. I was practicing like a beginner, but while doing so, I realized that it was improving my students' accountability as they were very concerned about the study; they started taking ownership and showed more interest as they needed to be involved and share. This made me continue, and I am doing it passionately as I don't have to bother with other things in my school. These days, I am trained on it on my own, and even my school has given orientation and workshops, too. I am enjoying it as it helps my students learn, focus more, and show a keen interest in learning. (Fieldnotes, July '2023)

He shared the positive effectiveness of flipped learning, though some challenges exist. He connected it with his passion and was also happy to practice it as it demanded student accountability, and they started taking more lead in real-time teaching. He approved it as students started sharing and getting involved in studying more in comparison to the traditional ways he used to deliver lessons.

In my question of his perceptions on flipped learning in ensuring skills his students are required for this age, he shared this:

"I have seen my students seeking help from peers, seniors, teachers, and even from parents. They need to interact with each other, which has increased mutual respect and cooperation. In flipping class, students are at the center, and they explore, learn, ask, and collaborate for cooperation as they need to interact among themselves, as most of the time, they watch, read, and work in small groups. They are involved in discussion, sharing, and giving feedback, which gives them a sense of cooperation. For instance, once I used the jigsaw technique in a group of five and divided the context into five equal parts, each of them got one part assigned. When they were asked to combine in one, they started sharing their part, and they needed to learn as they needed to share with friends." (Fieldnotes, June,2023)

Concerning the contribution of the flipped classroom in generating new skills as required by this era, he shared it as the best strategy as it helped him to make his students more sensible and guided for learning, and he has further found himself useful in updating himself, too. He further said he found his students cooperating and collaborating to learn and communicate more than before as a result of flipped learning. He shared that it's effective, though it has some negative sides, which makes it more fruitful.

In my query about the challenges he has experienced while applying flipped learning in his teaching career. He uttered this:

"I was impressed with the flipped classroom the day I learned and was eager to try it. I am still doing it. I was continuously doing it as needed and in my interest, and I still had a good plan to do it. I have bitter experiences; for example, my students do not always show interest in watching videos, and some of them have very negative attitudes. Once, I assigned the video in the Google Classroom and asked them to watch it and learn the trigonometry formula. The next day, I started my lesson by asking them to share the formula and their understanding. That day, most of the students in class were not watching videos. This interrupted my plan. I was very angry seeing their attitude. One student stood up and even shared that he was not in the mood to watch it as the video contained a harsh voice and was not an interesting topic.... I was speechless. Sometimes, I felt very low as I needed more hours of preparation and when my students were not taking ownership of the task provided to them. More interestingly, one day, my classroom was a bit noisy, and my supervisor was looking outside the classroom. He later called me and told me not always to keep them working. He also directed me to be like a teacher, and I must only have command and control in my teaching. This made me sad as I had to bear pressure while going for flipped-like pedagogies when adopting student-centered teaching." (Fieldnotes, July, 2023)

Despite the effectiveness of flipped learning, he perceived it as a challenge, too. Since it's a new personalized and technologically enhanced learning tool needed for twenty-first-century skills, He perceived parental involvement, students' motives, the digital divide and connectivity as a challenge. He also found it more critical to change as it is not applicable in every lesson and situation, as well as in the workload, time, and skills teachers require, as well as in the readiness of students and schools. This means that it's being practiced with challenges based on context and teachers' availability.

He further shared:

"Even during the COVID period, make the class more interactive. I had to spend five to six hours collecting the proper context as per the needs of students; it was so difficult for me to find instructional videos for five different classes, and uploading, trimming, and designing them in our classroom setting was very tough. Even the administration did not show any concern for my hard work and sometimes gave awkward remarks in involving students" (Fieldnotes, June 2023)

Concerning his practice of mathematics, he shared:

"I needed to assist them in mathematics, and in my case, uploading textual content didn't help unless I linked it in the class with the instructional videos uploaded to Canvas, Facebook Groups, and Viber. I tried uploading everything to that platform. However, initially, it was not effective as many were not focused on learning. Ever since I started involving them in group activities for discussion, I realized they were growing as they were found to be active learners and developing collaboration and creativity skills through the discussion-oriented model. This model is the best one in my experience, especially in mathematics. What I did today is dominate practice for me." (Fieldnotes, September 2023)

He shared his story of his initial days of application for a flipped classroom, and his trial gave him the energy to continue it to make it more systematic. For ages, the blame that existed for teaching mathematics can be defended with the help of a flipped classroom. He shared that when he applied it in the classroom, the engagement, participation, and interaction increased, though he found some students were not showing concerns. His sharing reflected that teaching mathematics was effective when applied in the discussion-oriented flipped learning model as it enhanced students' skills.

Concerning my question on his practice of flipped learning, he further shared: "I did it as it encouraged me when I found my students actively learning, which you observed in the one-word shop that I attended; we were shown a video first and asked to point out the major things quickly. There, I could see everyone's readiness to share their take. That was in my mind, and I did it. The day I joined the school. Here, I also found students more active and competitive when working in groups, so this has been my practice as it is to double up the active learning through everyone's participation. You must have seen that. You must have noticed my entire process while observing as well. Most of the time, I got overwhelmed seeing my students actively engaged, which we sought and even the parents desired of" (Fieldnotes, September '2023)

He further shared that his students doubled up engagement than before as of flipping, and he was more motivated to work and proceed with the same zeal. His students were increasingly active and even more competitive than before. His sharing reflected the contribution of flipped learning in increasing student participation and addressing parents' demands to build confidence in their kids. Regarding my question about his plans for a flipped classroom, he shared his plan:

"It's a perfect method needed for the Nepalese context. However, I plan to improve my practice concerning the materials, videos, regularity, and more. We even have a plan to run an orientation program for parents and a short briefing for newcomers as we have started to flip classrooms this year, even in class 8. I practice it not in a specific way, and I do it at random. Sometimes, I used it for a discussion purpose, and sometimes, I involved them actively in some engaging tasks like group presentations, assigning them to prepare slides, practicing questions at home, and making them present in class. I begin with their presentations and engagement in pairs and groups. This sometimes gives me pleasure as I don't even have to work at all, and my job is to guide them thoroughly when needed. In most cases, I saw them self-guided and even ready to support their friends. I keep them engaged at home and school through work, which has satisfied me as I can make them responsible." (Fieldnotes, June 2023)

After listening to him, I noticed that he was satisfied with implementing flipped learning. He found his role has changed, and the active engagements promoted through it, as well as the self-paced learning of students, ensured I felt it during the practice, too, while observing his class. Students' involvement in videos, slide preparation, uploading content, developing content and reading materials.

Concerned about my question of what made him adopt it as a pedagogy, he shared:

"While being in the UK as a part of the project run by the British Council. There, I come to learn about LMS and the importance of digital literacy in a changing world. There, I promised to flip my lessons and make my students able to compete in the world, providing them with digital competencies and developing such qualities even in me, as I was the only attendee who lacked such competencies. After my return, I explored, learned, and adopted, but after COVID-19, I was able to implement it fully. It was then that I realized the need for digitalization in education, and flipped classrooms have given shape to my imagination. I gave more shape to it during COVID-19 through selfexploration" (Fieldnotes, June 2023)

He shared that while being in the UK, he learned about flipped classrooms, and there, he promised to practice it after his arrival in Nepal; since then, he has been practicing with more exploration and systematic adjustment. He also applied it as per the government policy of marching ahead in digitalization, his self-driven desire to practice, and his understanding of the concept. The changing context leads to his practice.

He further shared:

The bad thing I experienced during my practice was the backbiting of my colleagues. They even sometimes reported to authorities and gave name tags over smart teachers who are increasing our load .... Laughter anyway, and I kept on my mission." (Fieldnotes, July '2023)

His experience of having difficulty in implementing flipped learning and some moments of satisfaction made him a real teacher who has adopted flipped classrooms on his initiative and motivation. He perceived it as a pedagogy to create a digital divide and that it was not applicable to the socio-cultural aspects of his schools, which offered a diverse population. Moreover, he perceived it as a challenge in terms of material development and the workload and size in the Nepali context.

## **Raju's Story**

Raju, my second participant, was born in Kaskikot of Kaski district, which is under Pokhara Metropolitan City Ward 24. But at that time, it was a part of the Village Development Committee. He was born in a beautiful Village one kilometre ahead of Sarangkot, a picturesque hill station and Pokhara's most visited tourist place. It was near the tourist spot but was not very developed then.

I was already known to him as we were in the same profession. I met him in the workshop organized by American Corner Pokhara, which was about teachers' professional development. Though I had met him many times, I had not known about his new position as a teacher leader. During my one-day stay with him in a workshop, I noticed his interest in innovative ways of teaching from his sharing in the workshop.

On a hot afternoon in the summer of 2023, there was heavy traffic from home to the school where Raju was teaching. Despite the hot and heavy traffic as per the prior phone conversation and the stipulated schedule for my first meeting with them, I reached his school at about 2:30 P.m. When I reached, and he was in his department with a laptop and a cup of coffee. The department looked digitized as I could see a printer, desktop, projector, and some more devices there. After a few minutes of talking, we started getting ready for the interview, as per the flexibility concept (Clendennin,2006), with open-ended questions. My first question to him was about his birthplace and schooling.

#### **Schooling Experience**

Raju did his schooling in the village called Kaskikot, a place one km ahead of Sarangkot. He started his first schooling at Maliaka. Basic School was near his house, and he joined grade VI at Malika Secondary School, which was a bit far from his house. He did his SLC (School Leaving Certificate) from the same school.

With my inquiry about his Schools (Basic and Secondary) and his class's teaching style and pedagogy. He shared:

"There was a completely traditional method at that time. The teacher was the center of knowledge and a man who knew everything. Whatever he/she said was okay, and we fought completely using lecture methods. Where the teacher used to give lectures, and I had to listen and respond If asked in between. There was no substitute for lecturing, but one day, when I was in class 9, my science teacher brought the same tools into our class to make us learn about them at home and collect the same type of pots and utensils at home. Sometimes, he took it outside the classroom for observation, but it was very rare. In fact, instead of lecturing and asking students to rot, nothing was used in teaching those days." (Fieldnotes, June, 2023)

In my queries on his schooling background, he reported that it was completely traditional in terms of delivery and pedagogy. There was no practice of teachinglearning beyond the lecture method, and it was completely teacher-centric. There was no chance for students to learn as there was only teacher-centric education where the teacher was in charge of the classroom and took full charge of the teaching as a transmitter of knowledge. However, the higher classes he goes to are more studentcentric as his teacher started to take them outside of the classroom and some exposure classes. Though there were changes, the lecture method was practiced at that time. This shows the evolving nature of pedagogy in the Nepalese context.

Then, I kept asking more about the teaching style and the reason behind the lack of another teaching method. He further added:

He reported the condition of teacher-centered methods and the lack of chance for students to interact and learn, possibly because of a lack of teachers' awareness of pedagogies and training as they required them. This is probably a government issue, and teachers were deprived of the newest pedagogies because of insufficient training as per the ratio of the teachers. This showed that in his schooling time, anyone could get a chance to be a teacher, and whatever was traditionally practiced in teaching was continued without the proper pedagogical knowledge of teachers at that time. This shows the negligence in the teachers' appointment policy, too.

#### His Higher Study in a blink

Raju joined his PCL (Provisional Certificate Level) in 1999 at Prithvi Narayan Campus, Bagar, Pokhara, which was near his village. There, he did his I.A. and B.A. in English literature at PNC. After he graduated from PNC, he went to Kathmandu for his Master's degree. He started his master's at Raipur Central College in Trifuran University and did M.A. From there.

## His Initial Teaching Styles

After completing his Master's degree, he started teaching at the school where he did his SLC. With laughter, he added to my question. How did you teach then as a fresh teacher? He replied:

"I was not the Exception. I taught the way I was taught in school and college by lecturing. There was not much of an encouraging environment to try new methods. Once, I gave some written notes to my students and asked them to copy them as it was necessary to make notes, and I perceived it was good practice. I did that as no photocopy service was available there at that time. But the next day, my head teacher with anger shouted and spoke"}"If you are to give notes and not to teach, please quit your job" .....this made me go back to lecture and ask them to rot and listen to my monotonous lectures only". (Fieldnotes, June, 2023)

There was no visible change in the teaching-learning activity while he was a student and when he started teaching as a teacher. He shared that in his initial days of teaching, the teachers used to get scolded for even adopting new pedagogies in school, and they had no authority to proceed as they wished. Though there was no variation in teaching, he tried something new, and they did not accept it as they had perceived the lecture method of teaching with book, chalk, and duster was everything in teaching, but his new try was good enough. This was because of a lack of autonomy in teachers as teachers were forced to align with institutional provisions.

After two years of teaching in his village, he started to teach at Mt. Everest Secondary School in Pokhara Valley. There, too, he started teaching the same way he did, but after a few years of teaching, he brought some changes. He used to ask students to teach, and he used to guide them for his self-satisfaction and to try something new besides lectures, notes, and sometimes students as a teacher. There was no other innovative way of teaching. He shared his teaching career in his second school. His teaching career marked a slight change in his mid-career as a teacher, but a lack of uniform practices remained, and remarkable changes were not seen.

"There was no innovation other than what I learned in school and college and how I was taught. I was just a replica of my teachers. I gradually tried new things, like group work, pair work, and some interactions, but most importantly, the lecture method or traditional way of lecturing was common for about eight years of my teaching. For the last 5 years, I have been using technology.... It showed his interest in adopting new ways of teaching. He started with notes, brought discussion in class, and even integrated technology in class as of my involvement in some professional learning communities." (Fieldnotes, June, 2023)

He also shared the dominance of the lecture method in teaching-learning activities, and when he realized it was wrong, he started exploring the use of digital technology in conducting teaching-learning activities. This change he adopted made him competent and distinguished him from others as he could make a difference in what was practiced and replaced it with time. This motivated him to explore the newest technologies.

#### **Turning Point of Adaptation of Flipped Learning**

He joined his present school in 2012, MTO Secondary School, Pokhara; he started teaching in a new atmosphere as it was a school run by international management and more or less affected by the outer world and new educational ventures as people there have a chance of international exposure. He shared:

"Concerning the flipped classroom, my participation in the training organized by the US Embassy (Relo Office) in Kathmandu is my big turning point. There, I learned about it for the first time in 2014, and I was super happy and excited to adopt it in my class. The school had provided one laptop to each of the departments. Because of the availability of a projector, I used to show some downloaded videos in the first part of the class, and I followed the discussion accordingly. I have no objection to doing it and have a good environment. The principal used to encourage me even in the meetings. So, I started to learn more in the area. Yes, I adopted it in feasible ways in my school, and I love doing it because I have a supportive atmosphere. During COVID-19, I did it with great zeal, and even in the COVID period, we prioritise it as all of us have laptops, the school has ICT-friendly classes, and students have devices. I am happily doing it." (Fieldnotes, June,2023)

According to him, his innovation in teaching flourished after his jump into the present school, which is led by his participation in the training provided by (RELO)He shared his experience of satisfaction with flipped classrooms in his early career, during COVID-19 and even at present He shared that he got good support from the school authority. He shared its applicability in post covid beyond the random practice during the COVID period. Concerning my question about his early perception of flipped classrooms, he shared:

"Of course, it's my choice, and I applied, and there is joy in having it practiced. I was fully convinced by this promising technique when I first learned it, and I will have the same positive perception now and in the future, as I am fully happy with my practice. But sometimes, because of the extra load and lack of cooperation from colleagues, parents, and sometimes some troublesome students made me feel low, I won't quit.' (Fieldnotes, June, 2023)

He also shared that he went for flipped learning because of his own motivation and interest, as he always sees ahead and wants to try new things in a new way when possible. Raju's Story also provides relevance to the effectiveness of flipped classrooms. Here is the excerpt of his sharing:

"I believe that the use of flipped classrooms in my teaching career has given me satisfaction as my students are more accountable in learning tasks. They show much concern towards learning, and I have found a sort of joy in exploring more on the topic of competitive feeling among them. I have never experienced such in another way in my teaching life. The rigor they have in their study is flipped classroom. So, I am happy to do it." (Fieldnotes, June,2023)

Raju said that in a flipped classroom, his students were even making extra effort and had developed more positive connections. He has perceived the effectiveness of flipped classrooms in allowing students to add extra effort in classroom time. Though it's a burden for teachers, it's been effective for him while practicing it. He further uttered the story as:

"...... When I came to know about it, I was panicking as I was not aware of the possible outcomes and perfect strategies to use it. I tried with fear and finished in joy as I found it the best-fit pedagogy to keep students engaged. When I assigned them the videos or context, they were hurried to explore more. I could even hear them sharing their preparedness to share the task in class during breaks. I sensed it was the right method to make them engaged at home and inside the classroom. These days, they are having constructive engagement in the post-Covid period. I am happy, and I have rated this as a great platform on which to rethink my professionalism. Its effectiveness is very high concerning engagement. About five percent of students were found to be unsupportive on some particular days, but it was okay later. They cooperated when they felt its strength. "Earlier ...". (Fieldnotes, June,2023)

From Raju's sharing, it is strongly understood that a flipped classroom is adding to the student's engagement in school and home, and he is happy to see that and perceives it as an effective pedagogy, but it is not flawless and carries some challenges and a kind of burden for teachers as they needed to prepare content, but when practiced with preparation, it's a good pedagogy in Nepalese context. Keeping students consistently engaged and honest is yet to be fixed. Regarding my point on the role of flipped learning in instilling some skills required for students, he shared:

"I joined a program back in 2015 organized by the US Embassy in Kathmandu. on the theme '21st Century skills and K-12 Education'. At that time, I was not very clear about what it was and how to do it. However, a month later, on LinkedIn, I saw a video on how to generate 21st-century skills in students. That awakened me, and I recall my trainees when I heard the flipping classroom for the first time. As a teacher at Elite School, I had a laptop, and the students used the gadget. I started my science lesson in class 10 by providing the video in their email group and giving them some instructions on what to do and how they had to present the lesson. The next day, I was astonished to see their creativity in presenting the lesson on the heart's function by watching Videos. Some were so creative that they delivered the lesson the best way in the video, and some tried different ways of delivering the lesson, like in a dialogue. (Happiness overloaded). They were more than creative" {laughter with smile} (Fieldnotes, June 2023)

He shared that flipped learning has been useful in creating a new atmosphere for learning, but in the case of teacher competency and effort, he said it gave him a challenge, and he struggled earlier. Flipped learning is effective for both students' and teachers' growth and generation of skills as it helps students engage in groups and teachers in learning professional groups for effective use. Connecting to the challenges he faced while adopting flipped learning, he shared his story:

"We are in the learning phase, and all students cannot access the internet. Poor connectivity exists as we have a mixed group of students with a diverse economy. "Sometimes because of administrative pressure and parents' misunderstanding the use of devices and a load of students also disturbed me in the proper implementation of this pedagogies. I do have one story; one of the parents from the Gurung community was mentoring one child {her cousin}; one day, she came with anger and shouted at me, saying custom master ho timi mero vadainii lai mobile chala matra Vanni Ratti Ratti mobile chaluchh, even you para sabi bidhyarthi le gare timi jagir choda, vaidini le vanchh sir le bana vanekko ho .... (Fieldnotes, July 2023)

The teacher also shared his experience of being scolded by parents. Initially, it was quite difficult to convince parents concerning the practice of flipped classrooms,

and still, it was a challenging task. Parental involvement and institutionalized support are equally important for the right implementation of flipped learning, as they both hinder it.

Concerning my question about why he adopted it. He further shared his need to go as per the shift in teaching learning:

"When school started sending us to a different professional circle to learn innovative ways and provided laptops with enough expenditure, I learned the value of going digital and realized it's part of professional competency, and I strived to bring innovation in teaching and flipped learning also one of such innovative pedagogies. Without digital skills, it started being life difficult" (Fieldnotes, July 2023)

He further added concerning his experience of practicing flipped learning: "I see this pedagogy as perfect for teachers and students as they both are beneficial. On the one hand, teachers' jobs have changed from teaching to facilitating and guiding; on the other hand, students are seen as busy, engaged, and active, which every stakeholder in education demands. I love starting my lesson with discussion and group presentation as it decreases my role as a teacher and increases the role of facilitator. I believe teaching is all about helping students to be the content of learning. I realized it while practicing it. I prefer discussion as it guides them for self-directed learning." (Fieldnotes, September, 2023)

Here in this story, he has revealed the experience that flipped learning has been very useful in changing him from the hat of a teacher to a facilitator, and he is happy in his new role. As for his practice of flipped learning in his context, he shared:

"I usually provide access to learning materials like online videos and handout puzzles the way I did today. I ask them to have at least a basic understanding at home as it allows my students to know basic things, and I don't have to spend much time on simple matters. Like today, you observed my start based on their understanding of their self-paced learning. Since I am an English teacher, I often use this technique (discussion-oriented flipped classroom) by sending some related videos, text, and URLs and requesting them to come by watching them at home. While doing so, they learn basic skills, including vocabulary, the main message, and four core skills, listening, speaking, reading, and writing, in real teaching time in class. I link classroom activities with deeper engagement and discussion, as discussion and sharing help them enhance their communication and socialization, which is possible as my subject also demands group sentiment. It's very useful in my case, and I was dominantly adopting this way like I did today while teaching Condolence Writing" (Fieldnotes, September 2023)

He also shared that as of flipped learning, it has been easy for him to link the lessons and have connections in real-time teaching, and students are found to be connected. Regarding my question about his plans for flipped learning. He shared,

"I did it with passion, and I am doing it with compulsion during Covid and doing it with interest these days. But, I plan to replace my traditional way of teaching and completely go ahead with a flipped classroom for it. I am working on materials to develop my skills these days, and I am even requesting authority for its full implementation. We are looking for the bestmodeled practice. I am going to sort all my challenges by making them clear to the administration, sending consent forms, and even requesting the authorities concerned to be aware of them in advance. I do hope it will be institutionalized, too. I plan to make it a joint practice and even encourage a group of teachers to go for it, and of course, I do have a plan of advocating it since it timely concern" (Fieldnotes, September 2023)

After listening to him, I understand that he has a good plan to adopt flipped learning with full-fledged preparation in the upcoming days. He shared that he is going to make the best-modelled practice of flipped classrooms in his school. During his few years of practice, he found flipped learning a new way to promote e-learning, a tool to connect homes and promote student-centered teaching. Despite the several positive aspects, flipped learning has been a challenge as parents have started scolding, and sometimes, students' engagement is not assured. The present workload is also hindering the full adoption of the model, and the lack of the right model as per context is yet to be explored.

#### Sam's Story

Sam is a computer cum science teacher who is good at operating computerbased technology and loves to explore this area. Because of his passion, he chooses to teach as a computer teacher in classes eleven and twelve. Most of his time is spent in computer labs and the innovation center of his school, as he loves to explore innovation and technology in depth. When I met him for my data collection, I called him a technophile because of his character.

It was a rainy day. I left Sundhara around 8 am as my interview with him was scheduled for 9 am sharp. I used Pathao to reach his school. Unfortunately, it rained so heavily that I was wet. I reached his school at a pre-scheduled time. My third participant, an M.Phil. a scholar at Kathmandu University, is the permanent inhabitant of Panautti Kavre district. He has more than 13 years of teaching. Currently, he is teaching as a secondary-level computer teacher cum science teacher at one of the public schools run by an education trust located in Kathmandu. I met him in an audiovisual room at his school. Following our pre-fixes schedule for over two weeks. After a few minutes of formalities, we entered into our conversation.

## **Schooling Experience**

At the outset of our interview, I asked him to share something about his schooling and the methods adopted by his teachers while teaching then the excerpt of his response is:

"I completed my school level at a school in MacharajGunj, Ram Secondary School. I don't remember anything that is a worthy way of teaching except the teacher's lecture. The thing we did besides the teacher lecturing was read aloud following the teacher's command. Most teachers were very old then, and they probably had no idea of innovative ways of teaching other than what they knew about teaching and how they were taught. They didn't allow us to speak when they were delivering the lesson." {Fieldnotes, June 2023}

The above narrative of Sam reveals the scenario of his schooling where the lecture method was the dominant way of teaching, and students had no opportunity to interact as the teacher used to be very harsh. Their queries were also not solved. The teacher was the dominator and the transmitter of the knowledge in class. He further added:

"Once, I asked my math teacher to deliver a lesson on my own (as I learned it from my brother) in his period, and he was full of anger and shouted, 'If you are here to teach, should I look after the cow?'. We were not even allowed to express our ideas and feelings. Teachers used to be with book, chalk, duster, and never-ending lectures." {Fieldnotes, June 2023} After schooling at Ram Memorial School up to SLC, he only continued +2 in science there. There, he found something different in teaching than his teachers in his school, who taught up to ten students. He shared:

"Bhanu Hakata Schools +2 is known largely in my area for good results. After joining the institution, I realized the recognition of my School in town as of its student-centred pedagogy, especially in eleven and twelve." {Fieldnotes, June2023}

After two years of study, he moved to Tribhuvan University to obtain his bachelor's degree. More priority was also given to lecturing besides some notes and ours and occasional group sharing. Seeing all this in his school and college, he promised himself he would start a career as a teacher with new ways of teaching. Hence, in his educational journey, he could observe the gradual shift in teaching style that is affected by the levels of study and the location.

## **His Initial Days of Teaching**

After his bachelor's degree, he started teaching science at the same school where he did his +2. He started teaching in 2012. Being passionate about technology, he started integrating technology from his early days of teaching. He added:

"In my early days of teaching back in 2012, technology was not much in use in schools; somehow, there was a computer lab/audio-visual room, and I used to bring my students here (we were in the same lab. Students used to be behind me and used to shout saying sir lab....). This experience made me to work on it." {Fieldnotes, June 2023}

His sharing was enough to judge students' interest in new ways of teaching and his satisfaction level. Though it was a new practice for him, which he initiated as of his own motive, the students' interest that he could observe increased, making him practice it in a more systematic way. The students were motivated and ready to learn with the changed pedagogy and were waiting for the videos to be delivered. The teacher's workload at present hindered the practice.

After joining this school, he enrolled in an M.Ed. at Kathmandu University as per the requirement of a B.Ed./ M.Ed. to be a teacher. His journey of M.Ed. in Educational Leadership paved the way for teaching innovatively as he was in the community of teachers. Most importantly, he learned to use the Learning Management System (LMS) and upload materials as he found the same practice at the University, and he was habituated to practicing it at the University. He started exploring LMS more in terms of innovative ways of teaching, and he shaped himself into innovative teaching.

## **His Turning Point Regarding Flipped Learning**

He told me that in his mission of exploration, back in 2017, he was watching videos on YouTube, and he was stopped by a video that was on the newest pedagogy in China. Regarding the flipped learning. He shared the incident like:

"I was randomly watching videos on YouTube for almost 7 years, and I got stuck with videos by sprouts. It also discussed the benefits of flipped learning for teachers and students. This made me try it once. So, I provided a link to students who watched the video at home and learned about the human heart. The next day, I started the lesson based on their observation. The students were horridly raising their hands to share what they had learned. I was astonished to see their interest in discussion and engagement ... (laughter). Indeed, it was an awesome experience." {Fieldnotes, June 2023)

There are many levels of twists and turns in life. He also went through many twists and turns while adopting a flipped learning in the past. He shared that what he is today is due to his passion. Though he practiced it with passion, he struggled a lot to provide digital content to some specific platforms and his students' digital divide in a perfect way. Regarding his present practice, he shared:

"As of Covid 19, we were forced to completely adopt it. It was an esteemed opportunity for me to guide my school and friends outside about this way of teaching. This gave more chances to have further exploration. Now I am habituated and give priority to this as all of the students have devices and good connectivity at home, and the school has developed a Learning management system (LSM) as per government policy." {Fieldnotes, June 2023]

After listening to his story, he was extremely happy to run flipped learning in the past and present. Despite being a community school teacher, the authority and his students highly supported him, and his motivation to use technology in class gave him a chance to practice flipped learning. He did his best to support the environment and his passion for innovative approaches to teaching. His practice is successful because of his competency in technological use, support from school authorities, and students' availability. Rom, it is critical to know that the success of flipped learning lies in the support from the school, students' honesty, and teachers' enthusiasm for working extraordinarily.

"I usually provide access to learning materials like online videos and handout puzzles the way I did today. I ask them to have at least a basic understanding at home as it allows my students to know basic things, and I don't have to spend much time on simple matters. Like today, you observed my start based on their understanding of their self-paced learning. Since I am an English teacher, I often use this technique (discussion-oriented flipped learning) by sending some related videos, text, and URLs and requesting them to come by watching them at home. While doing so, they learn basic skills, including vocabulary, the main message, and four core skills: listening, speaking, reading, and writing, in real teaching time in class. I link classroom activities with deeper engagement and discussion, as discussion and sharing help them enhance their communication and socialization, which is possible as my subject also demands group sentiment. It's very useful in my case, and I am dominantly adopting this way like I did today while teaching Condolence Writing "{Fieldnotes, August 2023}

He excitedly shares the happiness of implementing flipped learning in the past and present with the same spirit, and he also shared that it won't ever run away as he did it from the beginning. His practice revealed that the discussion-oriented flipped classroom and other latest models and technologies are not yet the best fit for our context.

Concerning my question about his plans, he shared

"I am going to request my school and colleagues to go for more training along with me as I want my school to be the best place for it. I am further trying to reach out to the education officer of my metropolitan city to include it in teachers' TPD courses, request the authority to have a new setting and allocate some budget for a fully flipped classroom. I am also urging the school to communicate with parents by sending information to parents concerning this practice in the days to come for more effectiveness and setting a guideline for proper application of it." (Fieldnotes, August, 2023

Now, he is in a land to make it a common practice nationwide and even requested the local government to take some leading role in including flipped classrooms in a Teachers' Professional Development program. His efforts to include parents also ..."

He is realizing the worth of teaching with the practice of flipped learning as it is very helpful in making students creative and communicate perfectly. His communication skills also helped them to be more social in the classroom and ready to open up for knowledge. Concerning this, Sam's story is different as he shared:

"I got a good chance to communicate with my parents. Earlier, I used to talk to them regarding their result and behavior part, but as of flipped learning, I am reporting about their teamwork, cooperating, and updates or sharing in the class too. Parents inquire how their child does in class, and they find them busting at home." {Fieldnotes, June 2023}

He also shared that he was able to have more conversations with parents about flipped learning, as parents often make a call and visit schools concerning the materials and assignments. From his practice, it's found that flipped learning has been beneficial in increasing the regular visits of parents in school, which was very rare. He further shared;

"... not only that for us also it's very hard. Sometimes, due to a tight schedule and also not being able to find appropriate context, we can't make effective use of it. Concerning my math, we hardly get interesting videos and handouts. I once spent four hours searching for the right context to upload. I struggled as I did not have skills in downloading from different sources; by listening to his second, it is obvious that sometimes teachers lack efficiency and load, also hindering the flipped classroom from being practiced." {Fieldnotes, June 2023}

The teacher shared his story of frustration in searching for the materials in the early days, and he was about to quit as it killed his time and made it quite hard to filter the document. He has shared the incident concerning the support of his parents.

"I got a good chance to communicate with my parents. Earlier, I used to talk to them regarding their result and behavior part, but as of flipped classroom, I am reporting about their teamwork, cooperating, and updates om sharing in the class too. Parents inquire how their child does in class, and they find them bust at home." (Fieldnotes, June 2023) He shared his unique experience of finding flipped learning to be the best tool to bridge parental engagement in school, which is a present need as many schools have it.

"I am a techno worm; whenever I was free, I used to explore this area whether I used it in class or not, but when the concept of ICT in education was introduced in Nepal. I must say I was the first one to use it in my class. Initially, I was even given the tag of the over-smart teacher as others were under pressure. Still, when I joined Katmandu University as an M.Ed. candidate in distance mode, I learned the need for digital literacy in this present world as I needed to work in Moodle, where many lessons were uploaded priority with teacher's instruction. This incident changed my practice, and I am doing it with joy." (Fieldnotes, July,2023)

He further shared his experience of exploring flipped learning more and more in the initial days; he loved it and wanted to have more perfection and got interested in knowing more practices inside the country, and he made a turning point as he learned much from Kathmandu University. Sam further shared:

"When school started sending us to a different professional circle to learn innovative ways and provided laptops with enough expenditure, I learned the value of going digital and realized it's part of professional competency, and I strived to bring innovation in teaching and flipped classrooms also one of such innovative pedagogies. Without digital skills, it started being life difficult" (Fieldnotes, July 2023)

When he realized the worth of this pedagogy, he got involved in the professional community and learned more pedagogies as he found it very helpful to adopt innovative pedagogies, including flipped learning.

"...teaching programming was very tough, and students were not much interested in it when I gave them the face-to-face instruction. However, when I tried uploading video and content in Canvas one or two days before the lesson, my students were actively participating and working as they knew the basics at home. Earlier, they were passive because of the tough content. You must have seen how active they were even today" (Fieldnotes, August 2023)

He shared that he is happy seeing his students doing much better in flipped learning, and he is happy doing it these days. Concerning his practice, Sam shared: "I prefer showing some videos and audio or distributing small content in the class in the beginning and giving some time to students to ponder the provided content, and I direct them to in-depth discussion. I do it as my subject also demands the same, especially in my practical period of computer use ever since I adopted flipped classrooms. I am doing this because it is student-friendly and convenient as my students always may not have internet access." {Fieldnotes, August 2023 }

He shared his plan of flipped learning with his priory checklist. He was very enthusiastic while sharing.

"In the future, I am in a plan to make it a full practice. I have developed materials, and the students have been convinced and motivated. I should only plan to motivate parents about it and request authority to reduce the workload. I am making this a uniform practice in my school as I provide training to my colleagues, and the school is also okay with this decision so far. So, I am committed to better practice in an institutionalized way." (Fieldnotes, June, 2023)

In my response to his plan for flipped, he has shared the better and institutionalized way of planning flipped learning as he has perceived it positively and is quite satisfied with his practice, though he experienced implementational challenges from various perspectives, including teachers' readiness, time to parental involvement and infrastructures. This suggests that flipped learning in the Nepali context with this scenario is challenging, though he has perceived and practised with good support.

## Medhavi's Story

My fourth study participant is Medhavi, a Social Studies teacher in Pokhara with an M.Phil. Scholar at Tribhuvan University, who is the permanent inhabitant of Syangja. She has more than two decades of teaching experience in social studies in secondary school. Currently, she is teaching in a national school managed by the Nepal Government under an education trust even in her early 40s.

She looks smart and has a passion for technology. She lives in a quarter provided by the school, and most of the time, she is found in the ICT lab of school with her laptop. It was a fine afternoon when I reached her school. I could see the innovation in the school gate itself as the digital map of the school was displayed at the entrance of the school. With permission from security and holding a visitor's ID card, I reached her at the Department of Social Studies, where she was scrolling down on the laptop. The nameplate (Medhavi Gautam) and her sitting posture made me think of her smart nature. It was the second time I had met her, and after some formalities, we started the topic sitting in the ICT lab as many teachers were in the department.

# Her Schooling Experience

Madhavi is originally from Partbat, and she did her schooling at the school located in That, which is four hours away from her home. Though it was in a remote village, her school was one of the best schools in Nepal then. The school called Jana Priya Ma Vi was a good center of education then. My initial question in the interview was related to her schooling. She shared it with a low voice:

"I studied in a village; I must say a remote village where I needed to walk for four hours to reach my school."

When I asked her to share her story further, she shared:

"My school is my pride; it was well managed, and all those who studied there got settled in higher-level government posts. I am also not the heart one.... (Laugh)... though lecturing was the only method of teaching delivery, it was enriching as my teachers learned. Our school got a prize in S.L.C. in the 2052 batch for having a higher passing percentage from my district. I must say, it was possible, as teachers used to address our problem in off hours. But during class, we never had the opportunity to share or discuss. My school had no telephone, mobile, or laptop facility." (Fieldnotes, August, 2023)

The idea of flipped learning was ignored initially. She said that the only method of teaching known as even practiced by her teachers was a lecture, and students hardly used to be involved in the classroom because their voices were left outside. Thereafter, she came to Pokhara in 2052, completing her SLC.

When Medhavi came to Pokhara to pursue higher studies, there was no provision for +2 then. So, she enrolled in Prithvi Narayan Campus Pokhara in a PCL (Provisional Certificate Level). She did an I.A. and B.A. from the same college and moved to Kathmandu for her M.A. Before her shifting to Kathmandu, she joined a one-year B.Ed., and this program gave her new insight into teaching as she could explore more methods of teaching beyond lectures that she heard in her school and colleges without substitution. It was one of the twists for her to see the teaching job differently. However, concerning the flipped classroom, she was not very informed. She added:

"I don't know if it was a flipped classroom or not; teachers used to come with big cassette players and video players in class, and sometimes, we used to hear audio on Shakespeare, which is tragedies and comedy. The next day, sir used to start the teaching based on our understanding or what we have heard. After listening to Sake's audio studio studio studio, I used to explore at home since my brother used to work in USAID and he was provided with the internet. He used to give reasons for printed copies. Also, we were asked to buy cassettes from a shop that contained audio, and we used to listen at home to that big cassette player that my brother bought from Japan. Though the lectures method was dominant." (Fieldnotes, August 2023)

Though there was not much use for innovative teaching methods even during her college life, her professors somehow tried new pedagogies. She used to print and read in advance by searching materials in the form of handouts and PDFs in emails. She was an extra smart student with a passion for innovation. Relating to her college life, there seemed to be a slight change in the pedagogies adopted by teachers.

## Her Initial Days of Teaching

She shared that after completing her M.A. in her first year and one year of her B.Ed, She started teaching at Super Galaxy School as a novice teacher. Though it was an English Medium School, there was not much variation in teaching compared to her school in Parbat. Being Smart enough and with great enthusiasm. She shared that she started bringing newness to teaching by providing printed copies of the discussion material to her students and used to link her lesson with that the next day. After a few years of teaching there, she got married, shifted to Sanja, and started teaching English at the Secondary level at Calvaria School. In connection with sharing the initial days of her teaching career, she told:

"There was no blended classroom like today, and technology adaptation was a far cry. However, in my initiation, I distributed some handouts to my students or divided the entire lesson into different sections and asked students to share. I did it as I wanted my students to be active in learning. However, I used to ask some seniors about the newest ways of learning. Then, gradually, there was no facility of computers in the computer lab, and I used to take my students there at least once a week to watch videos and audio and do relative activities. For doing all this, I felt low about backbiting. I was even given the name of a smart teacher. They used to say analogy le Dhari Kharafi ghaychak...." (Fieldnotes, August 2023)

It showed that she was the one who initiated the new practice where she went as a teacher. This trait of hers is the one that innovatively contributed to teaching and contributed in personalized learning. She was ignorant of what flipped learning is but found herself practicing it with a traditional way of flipped learning with the help of handouts and some printing materials. She shared her experience of backbiting because of the seniors' adaptation to new ways of teaching. She further shared:

"Despite backbiting, I was stuck in my mission and always took my students to AV (audio-visual room) for whatever way of teaching I adopted. I did it for chance and to arouse interest in students ...." (Fieldnotes, August 2023)

She shared that as of this pedagogy, she faced challenges, and whatever the situation she had to face as of this pedagogy, she continued and now succeeded in her vows made to herself. Amid the challenges, she continued it with a passion and succeeded, and she is now ranked informally as an innovative teacher at her school. It reflected that, in Nepal's context, changing from traditionally practiced pedagogy is also the blame game as it demands other teachers to work more, and those who start it became the victim even for doing it for professional demand.

# **Turning Point Regarding Flipped Learning**

After four years of teaching in Syangja, she moved to Pokhara and joined the current school, Gandaki Boarding School. Here, I presented a major turning point in her teaching career. She shared:

"I always had a passion for new and innovative teaching. However, joining this school is a milestone in my practice. Perfect infrastructure, ICT labs, and even One laptop one Teacher Policy of school gave birth to my passion for flipped classrooms. Back in 2016, my school observed the Golden Jubilee celebration and gave one laptop to each of us (permanent teachers); an ICT lab was made, and classrooms were set as per the requirement of ICT in education. So, I was able to flourish my teaching style here. I started flipping the context as per the requirement of my class the next day. I started with video links and later improved them as needed. I did self-exploration as well, and my engagement in professional learning communities also helped me gain deeper ideas. Our school organized one workshop on 'New pedagogy and integration of ICT tools' in 2018 by inviting experts from the UK as a part of the school project; since then, I have been adopting a flipped classroom. The Covid outbreak gave us the brushing up in this area as it was mandatory. Even after Covid, I practiced it as it was my professional need and passion. The school has also adopted this policy of compulsory use of technology. Seeing students 'involvement and creativity, I am happy and doing it till today" (Fieldnotes, August 2023)

She shared her flipped learning experience, which was possible because of a supportive school environment, her passion for safe landing, and the school's policy of ICT. This helped her adopt flipped learning as a new way of teaching and sharing her professional growth. The distribution of laptops and uniformed innovative pedagogy adopted in schools with the establishment of ICT labs in schools contributed to flipped learning. It gives the insight that flipped learning can be successful when it's an institutional practice and equipped with infrastructures along with the passions and motivation of the teachers to adopt,

Concerning my query on her perception of flipped learning, she shared:

"When I learned, I practiced it. Initially, I am taking this method, or pedagogy, as a new milestone that has helped me be a real teacher. Before I learned this method, I was not teaching; instead, I was giving lectures that were of no importance to my students. I liked it, so going for practice when none in my school did." (Fieldnotes, August 2023)

She also shared her story of adopting flipped learning to create the identity of a teacher of the 21<sup>st</sup> century, knowing that time demanded flipped learning. She has perceived it as a very effective tool that demands engagement and gives teachers a new identity, and it has contributed to achieving high performance of students. This resembles her real joy in adopting this pedagogy. Regarding my question on why she liked flipped learning as a pedagogy, she shared:

"When I learned, I practiced it. Initially, I have searched for student-centred teaching ever since teaching, but I never got to adopt what I knew in my classroom even if I wished; when I learned that flipped classroom, I completely went for pedagogy as both me and my students have full engagement in it and it remained fruitful in increasing motivation and achievement of students. So, when I felt it, I am taking it as pedagogy." (Fieldnotes, August 2023) Concerning her perceptions, she further shared:

"Our school provided laptops during the Golden Jubilee celebration, and I was under moral pressure to use them constructively. The demand for schools was also the same as classrooms, which were well set for ICT in education, but how to integrate and work was unknown. In the meantime, I learned about flipped pedagogy from my community of practice, Global Teachers Group. That led me to explore, and I tried in class. It was easy as my students had Suite accounts as an ICT project in school. So, I started sending them videos, text, and supportive context in their class emails, realizing that flipping classrooms is the demand of the present context. I searched many, but this is the best option I found in my professional career as it is a timely need" (Fieldnotes, September 2023)

She shared her joy of seeing students engaged in this pedagogy, which has motivated her the most. *This has offered a platform to adjust the school's IT-based teaching strategy with the implementation of IT projects. This reflects that flipped classrooms have contributed to marching ahead in the adaptation of digital pedagogy and online learning or eLearning portals at the institutional level as well as at the national level.* 

She further uttered concerning the usefulness of flipped learning in enhancing communication skills in students:

"In my ten years of teaching experience, I have never experienced an increase in student interest in learning, which I found while using a flipped classroom. It is a very good pedagogy to enhance students' communication skills as they watch videos, read, and share in class, and those who never speak also have to speak in class. I believe it has directly or indirectly enhanced their communication skills. I am finding it much better" {10 September,2023}

She shared that her initial teaching days were full of frustration as students were found to be less engaged and did not get such a chance. Her concern further is presented as:

"Once, I assigned the video to ten students in the social studies period related to geography. I uploaded the video to Google Classroom with the link, assigned the task to four groups, and gave two days of preparation for sharing in the class. I was overwhelmed to see my student's creativity in sharing the lesson they learned. I found the extra creativity in them, and it was beyond my expectations. The four groups discussed among themselves and allotted parts like introduction, physical features, economic and social life, and vegetation. The way they delivered lessons was awesome and so exciting, and it was a matter of pride for me to see them grow so creative." {10 September,2023}

She shared her experience of seeing students more engaged and creative in flipped learning and happy doing it as the students do more engaged and creative activities. Concerning the bad experience she had in the course of the flipped journey she shared,

"Once I assigned my students to watch the movie (Seto Bagas, they needed to report their understanding in class to connect history lesson. Surprisingly, one parent called me and shouted, is your job to ask students to watch a movie for three hours? Are you teaching or Spoiling Children's habits?" (Fieldnotes, September 2023)

She had shared her experience of being scolded while going for a flipped learning in her initial days. Connecting the struggles, she shared:

"In my initial day, I mean before COVID-19, I had no idea about downloading videos or trimming there; I had to ask my son to do that. I used to upload the URL, but students got confused, and the class was not that effective. Sometimes replaying video was not possible in class after the decision to link their ideas due to poor connecting." (June 7, 2023) Her experience of being digitally competent via flipped learning is shared like: "In the initial phase of my teaching, I was only limited to book, duster, lecture, and whiteboard. But when I got a laptop during the Golden Jubilee celebration of my school as a part of an ICT education project, a moral pressure came to me, though I was limited to the use of slides and instructional videos in class. (laughter). But the outbreak of COVID-19, online workshops organized in school, and joining the professional communities of practice like NELTA Banke, Creative Teacher, and innovative practices of teachers gave me an insight into digitalization, and I adopted flipped classroom." (Fieldnotes, June,2023)

Medhavi shared that she moved to this pedagogy because of COVID-19 and is now happy to proceed with it, as it has helped her increase student engagement and create her identity in multiple ways. Medhavi further shared her experience of the practice of flipped learning: "I am really happy to see increased student engagement and learning desires. They have a competitive feeling and are even more motivated and responsible for their learning, which I never experienced when teaching them in my early career. This has made the students active and smart and given them a new role of real students as an explorer and a good presenter in the learning process."

Medhavi also shared her experience of being happy to see her students engaged, which she had been expecting for a long time and now could do as a result of flipped learning. Concerned about her experience in practicing flipped learning, she excitedly shared her story:

"I love uploading instructional videos, books, and relevant content to different portals like Viber and Google Classroom for my students in advance. While doing these, students are more engaged and motivated to share and interact among themselves and even with me, which has developed their language skills, in addition to my role as facilitator. To be honest, this is what I have wanted for a long time, and I have been finding it possible ever since I started flipping the class. My students are super active in learning. I hope you must have noticed the second group's willingness to share ..." (11 September 2023)

During my observation of their class, I could see the students' heavier engagement as of a flipped learning. The teacher was found facilitating the class and helping them learn, too. In my query of her obstacles. She replied:

"I had faced many obstacles and challenges. The first one is the lack of support from my colleagues, who kept demotivating me and putting pressure on me not to go for it. Secondly, some naughty and let's say no's groups of my students who always make excuses for homework usually came without preparation...." (Fieldnotes, September 2023)

Concerning my question about her plans for flipped learning. She shared: "I am very much happy for it and even advocating for it. I also plan to make my colleagues more habituated to it. I have prioritized the development of quality materials and even talked to the authorities to support us financially in preparing materials.

Concerning her way of practicing flipped learning in her setting, she shared that she plans to make flipped learning more impactful in the coming days. She shared that she advocated for it and planned to prepare good materials seeking support from the schoolmate's story reflected the more positive sides of flipped learning and also the unique practice of flipped classrooms has provided to institutionalize schools as the schools with ICT in education relating her experience. It is critical to have better infrastructures in schools and materials, and access to technology resulted in the successful implementation of it.

While exploring the personal portrayal of the participants, starting from their origin and schooling to present conditions and turning points concerning flipped learning, I came to know how teachers adopted flipped classrooms in the course of changing contexts. This helped me to know their roots, as their origin and background always mattered.

Similarly, listening to their stories, I have found that participants have gone for their gradual professional growth. They (teachers) were found growing professionally and personally, every day, inspired by their mission and situations they were linked up. They shared their stories so spontaneously concerning teaching and flipped learning. Their stories vividly elucidated teachers' adventures and efforts to adopt flipped learning. I have blended the following themes from the interview transcriptions of the four participants I presented above.

# **Chapter Summary**

This chapter described the individual narratives of my research participants, including their childhood, schooling, higher studies teaching career and turning point regarding the use of flipped learning. After each story, I remark on the insight I got from their story's explanation of their context and scenarios of the time. This section provided a linkage to the next section as participants shared detailed stories of their experiences concerning how they learn, how they teach, and how they turned into flipped learning.

This chapter has just provided the detailed stories of participants to provide insight into their understanding and practice of flipped learning with linkage to their past, present, and future concerns concerning flipped learning adaptation. It also provided linkage for further interpretation and discussion of the data.

#### CHAPTER V

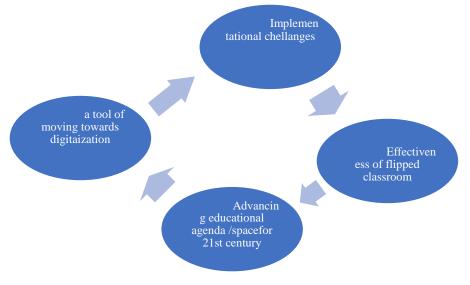
## PARTICIPANTS' STORIES ON THE PERCEPTIONS OF FLIPPED LEARNING

In this section, I have tried to interpret the participants' stories as articulated above, blending my experiences since I am a teacher. I also blended all stories with the theory of connectivism and constructivism while interpreting. I also supported other existing literature from home and abroad. While doing so, I used four key themes (of meanings) that emerged from the narratives, which I have discussed in the following headings based on my research question in this chapter, I laid focus on how participants' perceptions of flipped learning as of their understanding in their context and practice.

The themes I presented here are based on the participants' stories, which were presented above to meet the standard of narrative chronological order and the qualitative approach, including profiles of their schooling, turning point of flipped and future plans.(Merriam & Tisdell, 2015).The themes were based on common and distinguished narratives they shared explicitly, starting with their schooling, college experience, their first teaching experiences, turning points in flipped learning, and their present experiences and plans. These themes were generated based on their different stories on different chronologies of incidents and node-based organization of themes (Riessman, 2008), and later, I turned them into thematic analysis (Braun & Clark, 2006) by merging their experiences of flipped classrooms concerning their past, present, and future as required concerning to the perceptions of the teachers.

To ensure the quality of data, I have developed these themes based on the principle of narrative inquiry, ensuring sociality and temporality with a blend of their major expert in a chronological manner, as opined by Connelly and Clandinin (2006). I presented the long excerpt of the participant's stories above in chapter iv to create the link, and very short excerpts were used without redundancy in this section for reference. I also used a third-person narrative to present the key ideas. The researcher developed narratives when required, and participants' key ideas were quoted while blending with literature and theory, which gave the study a theoretical lens.

# Figure 4



Figurative Expression of Themes on Teachers' Perception on Flipped Learning

(Researcher's Idea)

## **Teachers' Perspectives on the Effectiveness of Flipped Learning**

Education is the bright light, and everyone should be part of it. It is also taken as a process where teachers assist students in gaining knowledge and skills and making them ready for the world (Lamichhane, 2018), for these teachers use different possible ways to conduct teaching-learning activities. Contributions to teachings and students' performance lie in the teachers' efforts to excel students in every aspect. Utilizing flipped classrooms can enhance such qualities, enhance instructions, and support the excelling of every student's potential. Flipped learning is one of the ways teachers have adopted to prepare students according to the needs of the present time. Teachers' experiences of using flipped rooms are taken into consideration from different perspectives. The theme's perspective of teachers on the effectiveness of flipped learning pertains to how teachers find flipped learning an effective way of teaching in the context they belong. This theme underlines the voice of teachers on the effectiveness of flipped learning as of its essence in increased accountability in students, improved engagement of students, and shaping teachers 'digital literacy and independent learning skills.

#### **Increased Accountability**

Accountability means taking account of things we do or taking charge of our actions. Accountability in learning is required. In the absence of it, no productivity is

expected. Lumino and Gambardella (2020) state that there is an inseparable relationship between learning and accountability. Accountability makes learning sound. Many participants said that the flipped classroom's effectiveness is seen as it has increased student accountability in many ways. They reported that this has made students more accountable for learning. A student can perform better when he/she is accountable for learning. In this connection, Sam uttered:

"I am fully happy to see their optimum accountability in learning. They were uploading the assignment on time and were even found to be showing interest in creating content and searching materials. Once, I asked my students to prepare video content on the heart and provided a reference, but surprisingly, he prepared a better one than mine." (Fieldnotes, Septeember 2023)

With this, it is worth knowing that flipped learning is increasing accountability in students, and all of my participants expressed happiness as they noticed this quality in students and found their students had an increased level of accountability than in previous years. Flipped learning had made them more accountable, and they were found to be most regulated. This goes with the findings of Akçayır and Akçayır (2018), who opine that flipped learning is the best way to promote student accountability. This helps us to know that teachers' perceptions of flipped learning are trustworthy. I agree with this because I had also seen increased accountability of my students during COVID-19 when I was using it for the first time. I was satisfied with the practice, seeing my students' performance, and they were happily taking full charge of their learning and the task assigned to them. This has challenged the passive learners, too, and they have started to take ownership of the study. Likewise, constructivism (Vygotsky, 1987) advocates that learning is possible when learners are fully involved in learning and take ownership of learning. So, what my participants perceived aligned with the theory of constructivism, too. So, flipped learning has contributed to promoting accountability in learning endeavors.

My participants shared that the usefulness of flipped learning is seen not only in increased accountability of students but also with teachers, as they have perceived that accountability of teachers is found to be increased in flipped learning. Concerning this, Medhavi shared:

"As of flipped classroom, I become more accountable as I needed to explore on the new ways to make my class effective and I went beyond chalk and

# duster strategy knowing my well-defined role in preparing students when I knew this pedagogy...... "{Fieldnotes, June, 2023}

After adapting to a flipped classroom, both students and teachers remained accountable and developed competency. This aligned with Siemens (2005). He opines that in connectivism theory, learning occurs due to connectivity, and students and teachers are found to be connected and bear the responsibilities in a flipped classroom. This also goes with the theory of constructivism, as this theory demands that learning occurs only through the engagement and personal initiatives of students, and learning becomes sustainable when learners are involved and take interest. Teachers remained accountable in flipped learning adaptation because of it, and they were able to create the identity of digitally sound teachers as they moved ahead in learning digital technologies, knowing it was their accountability or part of the job description. They started learning from different platforms, knowing their job responsibility as flipped classrooms urged them to learn new things.

The stories of the participants above revealed that flipped learning was good enough to strengthen students' accountability, as they felt that students were doing their job of being fully engaged and accountable, and they had to share what they learned at home and in class. My participants have seen it as an effective tool for teaching students and seeing them accountable. This further matches with the ideas of Poudel and Sharma (2022) as they have highlighted the highly increased positivity of flipped learning in their rapid review of the world, as flipped learning is largely known for students' direct involvement. From this, it is worth stressing the effectiveness of flipped learning in recent eras and the time and demand for pedagogy to adopt transformation in teaching-learning activity. However, this contradicts the findings of Laudari (2019) and Rana (2022), who opined that online learning is ineffective because of the digital divide and lack of adequate teacher training. But here, students and teachers were more accountable for their responsibility. So, when students and teachers take accountability, learning is possible even in critical times. Sam shared:

As a teacher, I have more similarities to this finding as I also learned many technological skills and developed competency while using flipped classrooms during COVID-19. Students were also accountable back then fully. So, now I am convinced that my participants' sharing made me more confident to adopt this method of teaching and flipped classrooms are perceived as a tool to increase accountability in learning, which is a key concern in our context. My participants' experience can contribute to making learning more interesting as a flipped classroom increases accountability, and I am convinced of their perceptions.

# Engagement

Engagement is the backbone of teaching and learning activities. When students fully engage in the learning process, learning becomes sustainable, and they learn effectively (Parsons and Taylor, 2011). More engagement is required to make teaching and learning better. My participants perceived the practice of flipped learning as an effective tool for ensuring student engagement. Furthermore, it has also been revealed that it's a tool to connect engagement in school and at home and arouse interest in students in previously adopted classrooms. Shalin shared: "Ever since I started flipping my lessons, my students have been increasingly showing interest and have also found happiness in learning, getting involved, and engaging in study. I am happy to see them engaged inside and outside the class."(Fieldnotes, July 2023)

In this connection, I also agree with my participants that as for flipped learning, I also have the experience of more home engagement with my students. This further supported the theory of connectivism as it argues that learning occurs through the connectivity of networks and learning occurs at home, too, as they go for selfpaced informal learning through instructional videos at home. This, again, is supported by the theory of constructivism as learning occurs because of the web of networks and where technology assists learners.

Likewise, my participants have shared that the effectiveness of this classroom lies in making students active and more engaged than other pedagogies they adopted. In it, students get exposed to videos and learn through videos and other online learning materials. Raju shared:

"It's very nice to see their engagement level and curiosity to learn endlessly; sometimes, when I don't send it as my assignment for discussion in the Google Classroom, they keep on asking when they are sending the videos or some content to read. As they have to connect their learning at home in the classroom, I found them more engaged in both places. Their engagement has provided me with the satisfaction of applying this model of teaching (Fieldnotes, June 2023)

This sort of interpretation matches with the ideas put forth by The European Commission (2019, p. 10), which notes that digital competence "involves the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society". These teachers have seen increased engagement and increased links between home and school because of it.

Teachers believed that flipped learning or classroom makes them more responsible, and even they were found to have critical engagement. This perfectly aligns with the theory of constructivism as learning occurs and becomes effective when every individual engages and learns from their interaction and engagement. My participants further shared that flipped learning is found to be effective as it helps students to have an interest in studying, as instructional videos and even passive students were also found to show interest in studying progressively, keeping them more engaged. This again goes perfectly with the ideas of (Johnson, 2013). Students were seen showing more interest in studying flipped learning. These days, many students are found to be showing less interest in studying, and their performance has gone down. And teachers have reported that flipped classrooms are helping them to address this problem. For reference, I put the expert of Shalin's sharing:

"I was tired of making them able to get connected to the lessons as today as children don't show interest in the study and my efforts were useless in the earlier days, but as I started this model of teaching, I am able to address this problem somehow better than before..." (Fieldnotes, June, 2023)

I agree with the experience of my participant. As a teacher, I have also witnessed that students have less interest in our uniform practice of teaching traditional teachers as masters of all. The government has adopted many initiatives for making students centered teaching. The experiences of my participants can contribute to the adaptation of flipped learning as a new and timely pedagogy to fulfill the gap as it's seen as useful in arousing interest and keeping them fully engaged who were found to be lazy in a traditional way of teaching Plessis and Du Plessis (2020) see the effectiveness of flipped classrooms as it helped promote student-centered teaching keeping them engaged at home and class time and my finding has the same alignment as participants perceived it as a method of increasing their participation and engagement in enhancing the learning of the students.

This shows that flipped learning has succeeded in increasing students' engagement as they are busy at home and in class, too, due to open access to materials. This further matches the finding of Yen (2020), who opined that flipped learning helps students to get more engaged and offers students learning. So, after learning the participants' perceptions, it's obvious that flipped learning is essential in making students fully engaged and involved in teaching-learning activities. Students' engagement and student-centered teaching approach have been a far cry in Nepal, and even my experience of teaching for a long time also admits these facts. Flipped learning is a timely technique in Nepal's context as the government is going for a new and transformative pedagogy, as we have learnt from COVID-19. In this changing context where traditional practices are almost useless, flipped learning can be a new adventure as it is positively perceived pedagogy and best fit for critical periods like COVID-19, which I could reflect from my own experience.

Likewise, my participants perceived that flipped learning keeps students more engaged, and it aligns with the opinion of Barber (2015), who also perceived the effectiveness of flipped learning as it allows students to engage in learning at home and in school. My narratives of the participants stressed the effectiveness of flipped classrooms in improving the learning of students, resulting from large interaction with the videos at home and in school. This is similar to Yin (2016), who also says learning is possible through integration with an internet-supported platform. Also, according to the theory of connectivism, learning is possible when there are connections between networks, materials, and people. From this, it is worth stressing the effectiveness of flipped learning seen in the recent era and its timely and demanded pedagogy for adopting transformation in teaching-learning. I also agree with this point. As a teacher, I have never seen that level of student engagement before in my 14 years of teaching than I found in my flipped learning. They were fully engaged, and sometimes, I needed to rule them.

## **Digital literacy**

Digital literacy is the ability to get and create information in digital platforms (Heitin, 2016). Without this skill, sustaining in this age of digital technology and online learning is not possible. In this study, my participants also saw the effectiveness of flipped learning in making teachers ready for digitalization and

gaining information technology-related skills. Here I put the experts of Sam and Raju respectively: Sam shared:

"I had little knowledge of the use of digital technologies in the past, and after I started adopting flipped classrooms, my competency in using digital technologies has risen. I learnt some when I needed to create materials required, and I also got to learn from the professional community..." (Fieldnotes, June 2023)

Here I present the excerpt of Raju:

"I was not fully aware of the use of the latest technological advancement. As a flipped classroom demands integration of technology in today's evolving context, I learnt many things from this pedagogy. I learnt to create, upload, comment, and even extract content from the internet. I have a good command of the latest technologies that artificial intelligence has also offered. I give credit to flipped classroom ... "(Fieldnotes,June,2023)

Participants shared the effectiveness of flipped learning in shaping their digital journey and how useful it is in providing digital literacy. As flipped learning has evolved with the advent of new technology, their knowledge of it is applicable in this context, and their stories have gone with the ideas of (Meyliana et al., 2021). The teachers have revealed their happiness with being competent in digital technology as a flipped classroom. This is true in my case, too. Since my school started to run online teaching-learning activities, I have learnt flipped classrooms. When I started exploring and applying it in my daily classes, I tuned to grow digitally and learned the latest technology. I here also believe that this finding aligns with the theory of connectivism (Siemens, 2005), as flipped learning is applicable in the presence of digital access and learning occurs through a web of networks. My participants further shared that as for the digital materials and content, students showed more interest in learning instructional videos and content provided digital content, resulting in material development. Medhavi shared:

"My students started making more authentic materials with the videos I provided. It is beneficial for students and teachers in developing digital competency. I am happy to earn together with them. We both growing together" .... "(Fieldnotes, July, 2023)

Teachers have further reported the effectiveness in making students learn joyfully as of video content and full engagement and preparedness. This perfectly

aligns with (Rasheed et al., 2020). But to my surprise, this goes against Laudari's (2019) and Rana and Rana (2020) findings. They have found that online learning in Nepal is challenging due to the digital divide and lack of teacher training. This outlines the scenario that learning goes informally when they have passion for it and like the practice. After listening to the participants, they understood that a flipped classroom is needed in the present era, both in arousing interest in students via visuals and in going with the notion of technology in class. This sharing proved the effectiveness of flipped classrooms in the evolving context of education, setting them ahead for digitalization, as stated by The European Commission (2019). The practice of flipped learning shapes participants' digital journey. Concerning my participants' experiences, I agree that I learned many digital technologies from flipped classroom adaptation right from the beginning, and my students developed such skills parallelly. Flipped classrooms also offered multiple learning opportunities, offering a chance to learn to those who have multiple intelligences and different learning styles.

# Individual /Independent Learning Skills

Independent learning skills keep students at the top of the class as they help them to reach their full potential. Stoten (2015) states that the attitudes and behaviors of the students determine independent learning. My participants have perceived the usefulness of flipped learning in promoting independent learning skills. The students showed much interest in learning as they got a chance to get involved and explore. Here I present the sharing of my participants: Raju:

"Ever since I started to adopt flipped classrooms, I have never needed to worry about their learning. They spontaneously get busy and take the responsibility to learn. I only provide feedback, encourage them to learn and provide study support materials in face-to-face or individual inputs online and offline". (Fieldnotes, June, 2023)

Individual learning or independent learning is what we demand these days. Teachers added that it is effective in arousing students' interest in learning and that they have a kind of passion for it. This also goes with the findings of (Solissa et al., 2023). So, a flipped classroom is more effective and applicable in Nepalese as it has increased learning motive by promoting independent learning. Even the theory of constructivism is widely known for its usefulness in promoting individualised learning as students learn from engagement and exposure. This sharing again goes with the theory of constructivism(Piaget, 1964). After listening to them all, I have realized that the flipped classroom's effectiveness is perceived when they find it the best way of arousing interest in students, and its effectiveness is also found in making students and paving teachers' learning with students' engagement.

I also reflect back on my experience as my students were also found to be taking full charge of their studies. I was happy to see them taking full authority to learn about it, which I had sought for so long. However, one dark side of it is the time frame, and I was not able to give them a chance to share what they learned in realtime teaching. Likewise, teachers have revealed the usefulness of flipped classrooms in making students able to communicate more in flipped learning and enhancing some communication skills in them. This matches the findings of Mudofir et al. (2021). Here is the reference to what Medhavi shared:

"My students who hardly used to speak in the class started speaking and communicating in pairs and groups when I saw them in a flipped classroom...as students started learning in their self-paced and started to share in class" (Fieldnotes, June 2023)

The participants' sharing also reflected the usefulness of flipped learning in promoting communication skills as independent learning that led to sharing in class in a pair or group.

Having heard the stories of my four participants. I also retrospect my own teaching experience by using flipped learning during the online classes led by COVID-19. I recalled my memory of making my class more effective by keeping them busy at home by sending some videos, links and books in Google Classroom and connecting the class the next day on that basis; I was able to experience its effectiveness as students got a chance to learn openly even beyond the classroom setting and in the absence of teachers too. I also found myself more accountable, sharing the content fully, readiness to explore, and enhanced ownership as of flipped pedagogy and I could realize their increased motive for learning. Based on my participants and mine reflection, I also think that flipped learning is more applicable in our context as it is effective in creating independent learning, promoting engagement, shaping the digital literacy of both students and teachers and increasing accountability in students.

# Advancing Educational Agenda: Creating Space for Twenty-First Century Skills

This is the age of science and technology, and without the skills required in this century, life and learning remain incomplete. Twenty-first-century skills are required for this age, including collaboration, problem-solving, decision making and collaboration (Rodríguez et al., 2019). Advancing educational agendas and creating space for 21st-century skills denotes the skills teachers found improved in students due to the flipped learning they introduced in their teaching careers. Teachers observed that students were found to develop the skills of communication, creativity, collaboration, and cooperation, which are the skills that students enhanced in flipped learning based on teachers' perceptions of their setting and context.

#### Communication

Communication is the exchange of ideas by different means, including verbal and nonverbal communication. Ellison (2015) says communication skills are essential for students so that they can develop their potential.

Today's education should foster these skills. My participants have shared that they could foster communication skills in students as an adaptation of flipped learning.

Madhavi shared:

"I am happy to see my students growing good. They have started displaying skills like proper communication than before. I believe this is possible as my students went for individual learning at home, and they learnt through videos and content. They learn to communicate as what they have learnt at home is to be presented in the classroom. Even my students work in pairs and groups, which increased their communication skills and taught them to communicate properly, which is the most satisfying thing for me..." (Fieldnotes, June, 2023)

After listening to the very lively stories of the participants above, I conclude that they were able to actualize the importance of flipped classrooms in providing some skills required in this twenty-first century, including communication. She shared that sharing individually and engaging in self-paced learning was possible. I also have the same experience that goes with my participants. Students learned to communicate in my class as they needed to share what they learnt at home with their friends in real time, which multiplied their speaking ability.

My students also learned to speak formally when exposed to this teaching model. Even the students who were never found sharing and were having the tag of introverted students were also found to be sharing and developing communication skills. Sönmez (2020) has also explained the efficacy of flipped learning in enhancing communication skills as it demands students' direct involvement in learning. I also saw the appliance of flipped learning in promoting the communication skills required for the twenty-first century. My participant's reflections, previous literature and even my reflections contribute to declaring that a flipped classroom is essential and an appropriate method of promoting communication skill required for the twenty-first century.

#### Creativity

Creativity refers to creating something form self-efforts or the creation of something new. Students can be more creative and enhance such skills when they are exposed to self-paced learning and any materials connected to teaching-learning, and they can prepare themselves for the twenty-first century by developing innovative skills (Egwutvongsa, 2022). The essence of flipped learning lies in its ability to foster creative skills as students need to create materials and share lessons, which contribute to promoting their creativity. Sam shared:

Flipping the classrooms promotes students' creativity as they work in pairs and as per the teacher's instruction, and part of assignments is done in pairs and teams. Teachers reported the happiness of seeing them becoming more creative as they developed different styles and creations. This is also presented by (Leung, 2013), who reported the usefulness of flipped learning as it made students creative and active. Teachers further shared their happiness of seeing students working collaboratively to create. Raju:

"I was amazed to see them working so much spontaneously for groups and being competitive when they were assigned some tasks to be done. I am happy to see them working creatively in a competitive manner...." (Fieldnotes, June,2023)

It is found that the importance of flipped learning is seen in increasing creativity among students, as of the flipping activity, students were becoming more cooperative with teachers too, and were ready to take the extra load when required. This reflection of teachers further goes with Salehi et al. (2023), who opined that flipped learning yielded positive effects largely on students' creativity. The theory of connectivism also says creativity is enhanced as students learn through a web of networks, and it's useful for generating skills in a self-paced manner. With this, I have also reflected my experience that flipped learning is highly beneficial in promoting students' creative skills, which I see daily in my class. So flipped learning's contribution to making students more creative is validated as literature and participants' stories have been aliment. Constructivism also demands learning through learners' engagement, creativity, and interaction with the environment exposed to them. With this, all reference, flipped learning promotes creativity in students and prepares them for the 21st century.

# Cooperation

Cooperation refers to the relationship build between groups and people. For Salvato et al. (2017) cooperation is a "Joint work performed by persons who share a common goal, where the alignment of interest is central" (p. 963). My participants have shared that flipped learning promotes cooperation in students and results in higher performance. Sam shared:

"My students are hurried to work in Paris and groups; even their contact with me has developed. I assigned them to watch and share in groups or pairs, which cooperated as they needed to contribute in a group. This has strengthened the relationship among them too, contributing to the group's high performance as well...."(Fieldnotes,July,2023)

The theory of constructivism is best known for its efficacy in promoting cooperation and supporting learning. It opines that learning is also the result of operations among peers and engagement with them Vygotsky (1987). As a teacher, I have encountered several incidents in which cooperation is promoted in flipped learning, as students need to divide the workload, prepare the work, and divide the presentation sections. But one thing beyond what my participants said is that cooperation always sin flipped learning is not easy as students cannot work together. I have reflected while practicing it. I have also realized the usefulness of flipped learning in promoting 21<sup>st</sup>-century skills in students through these teaching methods. This also coincides with (Rasheed et al., 2020). They have rated flipped learning helps promote bonding among students. The findings of this research aligned with the

theory of constructivism as teaching-learning was engaging and collaborative. From hearing very real experiences of teachers I have, the study has revealed that flipped learning offered them opportunities for peer and group collaboration and helped them to develop 21st-century skills like teamwork, cooperation, and leadership in students to the fullest extent. The teachers' narratives reflected that flipped learning offered students a higher level of confidence and they were found to be very active in class. It created space for enhancing higher-order skills like decision-making and problemsolving and prepared them for 21st-century education as they needed to be involved in every step of discussion and every assigned task. It goes with the findings of (Lee & Wallecy, 2018). Flipped learning is perceived as a tool for making them competent.

In a similar line, teachers have reported a higher level of interaction in the flipped learning, which allowed them the chance to creativity and collaborate it is similar to the idea of Dong et al. (2021), who said that through active learning students develop collaboration and creativity skills required in the 21<sup>st</sup> century and which is the demand of present education. Under this theme, it is also found that flipped learning is beneficial in increasing students' cooperation and helping them to compete in the 21<sup>st</sup> century with development and it fully goes with the findings (Siew & Ambo 2018). Likewise, it also aligns with the ideas of (Huang & Lin, 2017; Galway et al, 2014). My Findings revealed that students can share, be involved, and participate fully in student-centeredness in flipped learning. It has further developed skills like problem-solving and decision-making and the higher-order skills needed in the 21<sup>st</sup> century. This finding also echoed the findings of (Du Plessis & Blignaut, 2020).

So, this research has been beneficial in preparing students competent with awardee of higher-order skills demanded by 21st century education. So, flipped learning appropriateness is found timely and prevalent in Nepal's context for transformed practices in teaching-learning activities and great collaboration in learning attempts.

After listening to the stories of all four participants on the role of flipped learning in providing them with creativity, collaboration, and cooperation, my experience also aligned with theirs. I have also closely observed my students collaborating, cooperating, and even going so creative during online classes and the post-COVID period. I proudly recalled the event of my class of ten students presenting every Thursday as a part of the flipped learning. They used to come with genuine creativity like drama, art-based teaching, and group sharing, with every individual engaged in the lessons taught that week.

So, with the stories of four participants Shalin, Madhavi, Sam, and Raju, it's found that flipped classrooms are useful in helping them advance the educational agenda of today by helping students get and develop some 21<sup>st</sup> Century skills (creativity, collaboration, cooperation, and communication skills). This is also presented in the work of (Rodríguez et al., 2019) as well.

I strongly agree with their experience as it is the same as my experience. Their teaching's retrospection and genuine reflexivity showed the pathway to advancing educational agendas by generating 21st-century skills that students need in this era. I do find similarities in mine and their experiences of flipping the classroom to promote such skills.

# **Implementation Challenges from the Teacher's Lens**

The theme of implementation challenges is directed to the challenges related to all the stakeholders of education and regarding the use of flipped classrooms as perceived by the teachers. The challenges included student-centred challenges, teacher-centered challenges, operational difficulties, parent-centred challenges, and workplace operational challenges. Challenges. My participants have perceived flipped learning as a challenge in this present context, although they have perceived it as an effective method of teaching.

# **Student- Cantered Challenges**

For the smooth running of flipped learning, there is an encouraging environment. Concerning the implementation challenges, student-centred is one such kind. This refers to the challenges associated with students, such as when students don't cooperate. Vuong et al. (2018) said that the implementation challenges are students' preparedness, attitude, connectivity, time with teachers, and honesty. My participants have also reported such challenges while practicing flipped learning.

Shalin's story:

"I was very angry seeing their attitude. One student stood up and even shared that he was not in the mood to watch it as the video contained a harsh voice and was not an interesting topic.... I was speechless."."(Fieldnotes,July,2023)

As he shared in the above excerpt. the teacher showed the experience of students' attitudes and interests hindering the smooth running of the flipped learning. This is also having some notation with the ideas of Rokenes et al. (2022). Students' attitudes and bad motives hinder flipped learning's smooth running. In the same connection, students' access to technology and the devices they use has also impacted the proper implementation at home, which is demanded by flipped learning in the Nepalese context. It is further supported by the findings of Wung (2016). Besides this, the learning behaviors of students matter in flipped learning. Ebron and Mabuan (2021) state that students' learning behaviours in flipped learning are one of the challenges. My participants even expressed it as sometimes they found that students' attitudes hindered its practice. They cannot run classes smoothly when students fail to prepare at home and present in class concerning their attitudes and behaviors of them.

They too have found flipped learning more time-consuming and a bit challenging in the case of students' preparedness and attitude. Sam shared: "Flipped classroom doesn't fit all students as some are quick and slow in case of the smooth running of real class time teaching..." This contradicts the theory of constructivism as learning occurs because of the involvement of students and when they don't show attitudes toward learning and support teaching, learning cannot go smoothly. Here in this point, I also go with this because in my classroom too, sometimes I find my students not cooperating and taking assignments easily, making false excuses of having failed to connect or more, leading to the lessons' slow speed. From this, I realized that students' attitudes and preparedness are the main challenges exposed to flipped classrooms in Nepali context for now. I also agree with my participants as our stories match. Even the theory of constructivism (Vogstky, 1987) demands learners' active involvement in the learning process and here, participants were sharing that students were not serious and it gave them a challenge. But this is not the case for a large number of students in my classroom. So, student-centric challenge is also one of the challenges in Nepali context as we are not habituated fully to learning online and self-paced personal learning.

# **Teacher-Centric Challenges**

A teacher's competency and skills are mandatory for the proper implementation of flipped learning. The urgent requirements are for the perfect implementation of flipped classroom teachers' skills and comprehensive knowledge (Zainal-Abidin et al., 2017). My participants shared that teacher-centric challenges are one of the major challenges in implementing the flipped classroom. Concerning the difficulties teachers meet while implementing flipped learning. Sam shared:

"I did not have skills in downloading the materials from different sources... I needed to do it for five periods. I struggled a lot in the early days. lack of digital competency and enough skills and training made me struggle a lot. Sometimes it was quite challenging for me to rate their performance too...."

By listening to Sam, it is obvious that sometimes teachers lack efficiency and their load also hinders the flipped classroom from being practiced smoothly. This goes perfectly with the findings of Rana (2019), who argued that teachers' skills are necessary for effective online learning, but in Nepal's context, they are not effective for now as they lack adequate training and skills. In the same way, Hamid, Sentryo, and Hasan (2020) concluded that learning online is quite challenging, and participants of this research shared that teachers' willingness and extra efforts are mandatory. My participants also reflected the same as they lacked many competencies to deal with flipped learning and struggled for materials. To go with the right implementation of a flipped classrooms in the Nepali context fully requires teacher training. Another scholar, Fuchs (2021) expressed the need for change in teachers' study mentality and skills for the flipped classroom. The teachers also perceive it as they shared stories of going the extra mile and hours of preparation as they practice flipped classrooms on their own. However, it cannot be easily implemented when teachers are not motivated to do it. Medhavi shared:

"I normally take four periods a day but when I wanted to flip all of my classes on daily basis, I need to work for more than eight hours for selecting, trimming and preparing materials. This is challenging and we really motivation.... he, tiring job" ...."(Fieldnotes,July,2023)

Concerning my participant's experiences of challenges, I do have solidarity. I used to take four periods in a day and prepare materials for four different classes. I spent more than ten hours in a day in my early days. I realized that with the present load provided to teachers, flipped learning cannot be effective. As the theory of connectivism says, learning occurs independently in a web of networks and, materials should be provided to students and for its teachers' competency is required. I must say flipped learning has challenged teachers' competency and Nepal's education scenario at this time, and for its right application, teachers' workload and training are suggested.

## **Challenges Related to Parental Support**

Students' success lies in the support of parents, teachers and students' readiness to learn. Flipped learning also demands parental involvement as learning is also done at home. When parents don't show support, a flipped classroom is affected. This is supported by Lo and Hew (2017), who believed parents' support and preparedness of students are hindering the flipped classroom. Medhavi shared her bitter experience of being scolded by her parents. She shared:

"Once I assigned my students to watch the movie (Seto Bagas they needed to report their understanding in class to connect history lesson. Surprisingly one parent called me and shouted, is your job to ask students to watch a movie for three hours, are you teaching or Spoiling Children's habits......" {...."(Fieldnotes,July,2023)

Medhavi's case is serious. Nepal's education scenario is not satisfactory and parents are quite ignorant of their responsibility towards their child's learning. This has challenged our schooling itself as home become a school as of flipped learning, parental support is must in terms of resources and gadget. If they are not oriented to it, it creates problem. Concerning this here is another excerpt shared by Shalin:

"My parents scolded me very badly when I started flipping lesson. she told me that master ko kam k ho sabi ghar ma hernni vay ,timi haru suter basa mero nati bigara ,kam chin yo mster ko...../she scolded me and questioned my role and also balmed me for abusing his grandson..."...."(*Fieldnotes,July,2023*)

After listening to their story, it was understood that parental cooperation and their attitude are also hindering the flipped learning's smooth implementation in Nepal 's context, where the digital divide and parental involvement in their child's learning are minimal. Similarly, parental participation and attitudes mattered in implementing flipped learning, which is also reflected by Gough et al. (2017). As a theory of connectivism demands, the involvement of learners is possible in a web of networks where technology is a must. However, when parents avoid the use of technologies and gadgets, learning is affected in Nepal's context. The theory of connectivism contradicts this sharing of my participants. I have also encountered such problems in my teaching career and parents show anger as they needed to provide gadgets to students and all children are not in excess of it either. Teachers are blamed for asking them to use gadgets for learning instructional videos. My reflections and my participants align with Laudari (2019) and Rana and Rana (2020), Rana et al. (2022) as they opined that online learning in Nepal is challenging as of digital divide and sociocultural aspects too.

Concerning parental involvement, Sam's story is different. He shared, "I got a good chance to communicate with my parents. Parents inquire how their child does in class; they find them bust at home...." {...."(Fieldnotes, June.2023)

Flipped learning has also been useful in communicating with parents. It has more advantages. So, when parental engagement is systematized and flipped learning is adopted, students' performances can be better and higher achievement can be expected. From the expert Sam, it is evident that the role of parents in flipped learning is great and also bridges teachers' and parents' communication, which is a timely requirement and he was found happy to do it. This shows that if parental involvement is there, it is easy to operate it, as Sam reflected, whereas if there is no involvement and support, teachers get blamed, as Medhavi and Shalin shared. So parental involvement is a must (for its effective use (Gough et al.,2017). In the case of flipped learning, parental involvement is a great challenge as we have a diverse population and education is affected mainly by socio-cultural aspects. (Rana, 2020). So, flipped learning cannot be effective unless this issue is settled. It is necessary to address this issue as soon as possible in Nepal's context.

# **Workplace Challenges**

Operational challenges are associated with the implementation of it by teachers in teaching-learning. My participants perceived it as a challenge in the Nepal context. Teachers shared the operational challenges spotlighted the role of school authority and technological support for properly implementing it. They shared that properly implementing flipped learning requires technological moral support from authority. This is also discussed by (McGrath et al.,2017), stressing the need for a technological atmosphere. Here is the story of the Raju linking to the operational challenges: "*We are in the* 

learning phase and our schools do not have access to the interne to full extent and it hindered our practice slightly......" {...."(Fieldnotes,July,2023) ]. Sam also shared his story of dissatisfaction:

"Five years back in my class, students were performing the drama .... .my principal called me to his cabin and asked about my role to my such but now such problem is not there......" "(Fieldnotes, July, 2023)

This story of Medhavi and Sam revealed that administrative support and technological preparedness in schools, such as flipping the class, play an important role in implementing flipped learning. This has some similarities with (Zainal-Abidin et al., 2017). Participants reported that there were many operational challenges in the flipped classroom. They have a wide range of challenges and some common challenges regarding their context. Here is another response by Shalin concerning the operational challenge:

"I had to spend five to six hours collecting the proper context as per the needs of students, it was so difficult for me to find instructional videos for 5 different classes, uploading trimming, and but it was not noticed and appreciated by my school authority at all, which discouraged me.i stopped and do as I feel like doing only.." (Fieldnotes,June 8, 2028)

Likewise, teachers have perceived that implementational challenges are created due to the school atmosphere, and the accessibility of the network in the classroom setting is also challenging things in the proper implementation of flipped learning as they all encountered connectivity issues in their context. This finding too coincides with Chen and Chen (2016). Along the same line, teachers have perceived that technology and its deeper knowledge and support from the concerned authorities are necessary. Lack of it hindered them in the right implementation of flipped learning and they struggled to find the right material and this is supported by the findings of Ansori, and Nafi (2018). There are exact similarities in both findings.

Likewise, teachers perceived that professional development opportunities and lower workload are needed for the smooth implementation of flipped learning, and it resembles the finding of Zou (2020), who says teachers' right workload, opportunities provided, and autonomy to work and execute are required for effective flipped learning implementation. Along the same lines, teachers' competencies, the balance of students' and teachers' skills, and bonding are also the implementation challenges expressed by participants. The stories related to implementational challenges also go with the theory of connectivism as there is a need for sound technological integration, and the web of networks supports learning, as students need to learn self-paced (Siemens,2007).

Like the stories shared by my participants. I also faced many problems in its proper implementation during COVID-19 and even before it. While practicing flipped learning, I faced a connectivity problem at my end. My lack of preparedness, tight workload, and parents' support and schools' connectivity were the major issues hindering my teaching. Here, I strongly put my alignment of experience with theirs as I struggled a lot in my early years of flipping the classroom. So, for the proper implementation of flipped learning, Nepal is not yet fully prepared, and this challenges the Nepalese context.

## **Moving Towards Digitalization**

Moving towards digitalization refers to the task of adopting digital technology. Here I relate it to educational technology. The theme of moving towards digitalization showcases the stories of teachers choosing flipped learning, realizing its timely need and being part of professionalism as part of government policy of technology integration. Technology has reached every hook and corner. Smartphones, laptops, and computers have helped advance learning opportunities with the national call for Information Communication and Technology integration in education, changing global context and the need for digital literacy and passion for professional competency of teachers and school's expenditure on ICT projects helped teachers to move on to flipped learning, with the effort of the school to provide a laptop to teacher's development.

The provision of LMS in school and professional development opportunities to teachers made teachers adopt flipped learning as part of their moral obligation, especially during and after COVID-19 in Nepal. Teachers' stories are blended under two different themes, including the promotion of personalized learning and efficient use of digital resources.

## **Personalized Learning**

Personalized learning addresses all students' needs and promotes studentcentered teaching. This means the use of educational resources to meet the needs of students. Pane et al. (2015) opine personalized learning as a teaching approach that meets every student's needs by leveraging technology and enhancing their potential through engagement and collaboration. My participants have reflected on their experience of applying flipped learning and its application in moving towards digitalization like below. Medhavi:

"I ....., the school appointed ICT coordinator and we got many learning opportunities of practice and slowly practiced flipped classroom as the newest way of teaching...... communities of practice like NELTA Banke, Creative teacher, innovative practices of teachers gave me an insight into digitalization and I adopted flipped learning which also helps to contribute to addressing the need of every student,I got to learn more digital technologies there as I joined them for having ideas on flipped classroom and technologies it integrates" {...."(Fieldnotes,July,2023)

Likewise, Shalin Shared: "While being in the UK as a part of the project run by the British Council....., I realized the need for digitalization in education and flipped classroom has shaped my imagination. Since then, I started implementing flipped classroom, which integrates technology in my class and because of the interaction and collaboration of all students, I was able to contribute to unfolding every student's potential"

...."(Fieldnotes,July,2023)

In a similar note, Raju shared:

"When school started sending us to a different professional circle to learn innovative ways and provided laptops with enough expenditure, I learned the value of going digital and realized it's part of professional competency, and I strived to bring innovation in teaching and flipped classrooms also one of such innovative pedagogies. Without digital skills, it started being life difficult" "(Fieldnotes,July,2023)

These three narratives revealed teachers' understanding of the need for digitalization to contribute to personalized learning. The theory of connectivism also supports that learning is easy and personalized when students are exposed to technological assistance, as connectivism theory says learning occurs in a network of people and digital technology (Siemens, 2005). Downes (2008) utters that personalized learning occurs when students are tailed to digital materials and provided self-paced learning opportunities. Teachers have shared that flipped learning has shaped their digital journey and contributed to promoting personalized learning. From different platforms, it was part of their willpower to adapt and change from reflection.

The change they adopted was their willingness to move towards digitalization and the introduction of school education policies in school. This also coincides with the findings of (Hajhashemi et al., 2016). From this, I am convinced that flipped learning has been beneficial in shaping teachers' digitalized journey and contributing to students' personalized learning. I have also found it a digitalisation journey as I learn to adopt some new technologies in education and teach my students to respect diversified needs. I have realized the use of flipped learning has contributed me to learn about models, virtual reality and LMS and help my students.

## **Efficient Use of Digital Resources**

Digital resources include multimedia, Coursera, edx, learning portal Duolingo, and many other things that promote teaching-learning activities. As flipped learning adopts digital technologies, educational technologies are widely used, and they have evolved and been modified with technological innovation. In recent years, flipped learning has adopted new and innovative technologies (Bergmann & Sams, 2012). My participants have also shared that flipped learning has allowed them to learn many new leveraging technologies and adopt them in this age of technology. Relating to this, here is the sharing of Sam:

"I am a techno worm, whenever I was free...., I learned the need for digital literacy in this present world as I needed to work in Moodle where many lessons were uploaded priority with teacher's instruction. I joined many professional learning communities to practice flipped classrooms effectively. I joined teachers professional learning community ......"

{...."(Fieldnotes,July,2023)

Likewise, Raju shared:

"When school started sending us to a different professional circle to learn innovative ways and provided laptops with enough expenditure, I learned the value of going digital and realized it's part of professional competency...that contributed in students learning and shaping my digital competency" ...."(Fieldnotes,July,2023)

These expressions conveyed the message of teachers' realization of moving towards digitalization as a part of the profession and as per the

demand of concerned schools and changing global scenarios. Teachers have reflected that flipped learning gave them a platform to expose themselves to the newest technologies and adopt in the changing digital world where personalized learning is marching ahead which is also adopted by flipped learning. This has the alignment even with (Borah, 2021). They have also stressed the contribution of flipped learning in making teachers go digital. I stand by the commitment of teachers after listening to their stories. Being a teacher at Modal School run by the Nepal Government, I have similar experiences and a string of experience in adjusting to the changing global context and shifting the education paradigm. I do have the same reflection as I continued to grow digitally as of flipped classroom-like newest pedagogies.

Likewise, The Flipped Learning Network (2018) stressed that professional educators are the strongest pillars of the flipped learning, and my participants also shared that the adaptation to flipped learning is the result of their professional development journey in the digital world they felt and practiced. Goodwin (2020) says teachers redefine and prepare themselves as needed. My participants have also revealed the flipped learning results from recreating their role in changing the world by adapting new pedagogy and contributing to the digitalized world through self-motivation and exploration of self-motivation. Participants narrated their stories of adaptation of flipped learning while marching ahead in digitalization in education as per policy demand for integration of ICT. It perfectly aligns with the findings of Chen et al. (2013), who say digitalization is a must for education and improved learning. However, this opposes the finding of Rana (2020), who opines that a lack of training for teachers hinders online learning. However, my participants learned to adopt digital technology in their self-motivation.

Shrestha (2023) said that the COVID 19 led emergency made all stakeholders of education learn ICT skills as it urged for online delivery of lessons and the same thing was revealed by teachers while interviewing stating that they were forced to explore new pedagogy as a paradigm shift and government call for ICT based policies and LMS, Moodle, Smarter App set up in schools in Nepalese context as well as of COVID outbreaks worldwide. My finding further goes with the ideas of Bergmann and Sams (2012) as today's children are techno-friendly and born with digital minds and teachers must teach them to integrate technology The same thing is revealed by the participants as they were to follow new trends, new ways and adopt in the digitalized context. Likewise, teachers have revealed the adaptation of flipped learning in their journey of acquiring digital literacy in the 21st century as a teacher and this matches with the findings of (Zainuddin et al., 2019; Government of Nepal Ministry of Education, 2016). Looking at this, flipped learning are found. However, this finding contradicts the findings of Rana and Rana (2020), who shared that online learning was challenged in Nepal due to insufficient skills and training. However, my participants learned new technologies when the paradigm shift in education led them to adopt and learn. As a teacher, I also agree with my participants that teachers should adjust and adapt as per the scenario as they are education drivers.

### **Chapter Summary**

This chapter outlined the narratives of the secondary teachers' perceptions about flipped learning in the Nepali context concerning the practices of the schools with adequate infrastructures based on the first part of my research question, perceptions of teachers on flipped learning. I have found that the teachers positively perceive flipped learning and adopt it with self-motivation and realizing their professional requirements as per their knowledge. Teachers have perceived it as an effective method as it promotes students' engagement, individualized learning and digital competency. Secondly, they have perceived flipped learning as a medium to advance digitally and develop 21st-century skills like communication, creativity, and cooperation, allowing students to grow competent. The third perception they have is flipped learning. Though they have practiced has implementational challenges as parents, colleagues and, administration, students and infrastructures are not aware of this and, which has made it challenging in the Nepalese context. The last perception I thematize is moving towards digitalization. They have perceived it as a medium to get digitalized in this changing context of Nepal. This was perceived positively as it helped them to make use of digital resources in a competent way and promotion of personalized learning.

To sum up, all the participants were happy with its implementation, besides the challenges they faced. They have perceived it as a new model that is the best fit for this era.

### CHAPTER VI

# TEACHERS EXPERIENCES ON PRACTICE OF FLIPPED LEARNING

In this chapter, I have presented the key findings of my observation based on the practices of teachers concerned with flipped learning. The stories I collected after post-class observation also adjusted into themes based practices they adopted in the classroom. From their narratives, I have generated the four themes concerning the practices they have. The four themes include promoting active learning, redesigning the teacher's role as a facilitator, a tool for self-directed learning, and diverse practices. These are the themes that resembled their practices. The practices were observed on three things- how they began the lesson, how they delivered the lesson and how they concluded the lesson based on the silent observation (Amundrud, 2011). Here, I present the different themes I prepared by observing their classes.

# Figure 5

# Themes Based on Practices of Flipped Learning



(Fieldnotes, July, 2023)

### **Active Learning Tool**

Active learning refers to teaching that demands the active participation of learners. Prince (2004) opines active learning is where students get involved and learn through engagement and participation. Shalin Shares his story when I inquired about his class after observing his class:

The sharing of Shalin highlighted the essence of flipped learning, making students learn actively. From the teacher's perspective, it was obvious that students were more active in the flipped learning than in the traditional classroom, which starts and ends often with the teachers' lectureship's theme covering the experiences of teachers in making students able to learn actively in the school and their experience of being able to do it in flipped learning. I observed the teacher's class for forty minutes and I could reflect on what they shared. It was visibly seen while visiting the classroom for class observation. Shalin shared that he was more encouraged and continued to it as his students were more active in class as of flipped learning.

Likewise, Sam Shared:

"When I gave them the face-to-face instruction. But when I tried uploading video and content in Canvas one or two days before the lesson, my students were found actively participating and actively working as they knew the basics at home...."(Fieldnotes, July 2023)

After listening to Sam's and Shalin's stories, it is revealed that their practice of uploading videos and content, bringing it into discussion relating to their ideas, and assigning the group or pair work has resulted in active learning, which encouraged more interaction and one-to-one discussion in class. This sort of active learning is also approved and uttered useful by (Akçayır& Akçayır, 2018). They opined the efficacy of flipped learning is that it offers active learning, keeping students engaged at home with the help of instructional videos and materials and students learn at a self-paced pace. I, being a teacher, too have experienced the same thing when I was adopting flipped classroom in the COVID-19 period or now. I was happy to see them actively engaged in the learning process without any pressure.

This is further supported by Siemens's connectivism theory (2008), which states that learning occurs when students get a chance to engage in a web of networks and materials provided to them. I am convinced of the Sharing of Sam and Shalin as they both shared the application of flipped learning in making students engaged. I, too, have found it very encouraging in my case. Because of the flipped learning, my students not only became active in watching video content at home but also found engaged and actively making new content. There was overwhelming participation of the students. It was very challenging for me to address the needs of all students and keep them speaking and involved in real-time teaching. I found it a bit difficult to manage the engagement as students sometimes go beyond our planning.

Flipped learning is known for its applicability in promoting students' engagement, motivation, interaction, and self-passed learning. My findings based on the teacher's observation classes go with this as I found students actively participating in the class concerning applicability pair work and even found much more curious and competitive among themselves while working in groups even when I was observing their class as a part of data collection. Secondly, my participants also said the same about the use of flipped learning in engaging students and promoting of an active learning environment in their classroom, which they rarely experienced in traditional classrooms. This finding is completely aligned with the findings of (Tutuncu & Aksu, 2018). They have opined on the worth of flipped learning in the promotion of active learning in the classroom. However, flipped learning is useful in promoting it. It's quite challenging in our context as regards the class size and timeframe provided to teachers.

As reported in other reviews, Tutuncu and Aksu (2018) said that flipped learning promoted more active learning (participation/involvement) within the classroom, with teachers reporting that students also come prepared at home for sharing, which has increased learning habits. While observing the classes, it was noted that students actively raised questions, were found prepared to answer, and got involved in discussions in class. This perfectly aligns with the idea of Backlund and Hugo (2018), who opines that learning happens when students are engaged. Besides this,

In the case of some participants during class observation in the physical period in the post-COVID period, it is observed that learning was disrupted concerning students' connectivity issues, and effectiveness is not ensured in our context. I also observed that scenario and the same thing was revealed by one teacher during an observation interview. I believe that in our context, where technology and connectivity are not strong, going with the flipped model of learning is quite challenging. I confirm that having the right application is quite challenging and does not apply to all in different settings, and it aligns with Yasar et al. (2022), who say that the effectiveness of flipped learning is beneficial in small-sized classrooms. Our size and the present digital setting are not adequate for practising it and fully employing the active learning of students. In this connection, I remember a class of mine during COVID-19. I was disconnected, but I, unfortunately, was found to be speaking all alone in the class, and students were dropping lessons and not prepared, which showed the reason for the connectivity issue. Further, this matches with the idea of the theory of Connectivism. This theory advocates for learning with some technical assistance and sound connectivity and further goes with the idea of Cormier (2008), who states that connectivism enables a community of people (working with learning technologies) to legitimize what they are doing. Medhavi shared:

"I have found flipped learning as an active tool for learning not only it promotes students' engagement it but also reduces teacher's role which is our demand as while being a transmitter of knowledge only students' performance was not satisfactory....."(*Fieldnotes, July 2023*)

My participants have revealed that the usefulness of flipped learning is high as it reduces teachers' load, helps students to be more engaged and motivated, and allows them to learn at their own pace, reducing the job of a teacher. However, in this connection, I do opine differently as this classroom cannot ensure engagement every time. I think that connectivity and affordability are other concerns in the Nepali classroom. Even while observing the teachers' class there, I could sense the lack of engagement of some students as a connectivity issue, and as a teacher, I have experienced it often. The theory of connectivism also demands the availability of the internet for smooth technology-enhanced learning, like flipped learning. This finding matches the theory that I used for garlanding my research (Siemens,2006). So, when the network is not available, students cannot go as expected.

My findings reveal that flipped learning creates challenges, but teachers are creating memories of their new identity as they have found themselves in the new role of facilitators, encouraging students to learn through interaction and collaboration with peers and other resources provided to them. This finding has perfect alignment with the connective theory that advocates that knowledge generation is the result of the link between the actions and experiences we have and learning happens in a collaborative community composed and connected by every individual's knowledge and experience (Bishop & Verleger 2013). In this connection, connectivity only plays a limited role in the flipped classroom when students are found to be completing preparations at home because the in-class activities are more crucial for a flipped classroom (Chung et al., 2019). My participants also say the same usefulness of flipped classrooms, but I think that if students could get through the material in advance in terms of connectivity and accessibility, the classroom discussion would be affected largely. So, flipped learning in our context is new and may not be the same case in another context. It outlines that flipped learning does not only have advantages but also has some disadvantages (Bevilacqua & Bergmann, 2018). They believed if students come without learning, no expected class cannot go so well. Flipped learning also has some weaknesses, and it was found to be the same while observing the class in two schools on different dates. Likewise, it is not useful for all students to have different learning styles (Domínguez Romero & Bobkina, 2021). Based on their practices, it is found that students have autonomy in flipped learning, and they learn digital technology autonomously. Constructivism interprets the emergence of new pedagogies where control is shifting from the teachers to more autonomous pupils in the learning process (Kop & Hill, 2008).

My participant also agreed with it, opining that flipped learning is beneficial in promoting a student-centred learning process, similar to the opinion of (Abou-Khalil, 2020). The I opine that flipped learning reduces teachers' dominance and encourages pupils' autonomy through engagement. While observing the class, I saw that in the first half of the classroom, students were discussing and sharing and were found to be very engaged. So, flipped learning is approved as a tool for promoting active learning tool.

#### **Self-Directed Learning Tool for Students and Teachers**

The learning initiated by the learners due to self-motivation is called selfdirected learning. Self-directed learning is on the rise. Self-directed learning is the best-known way of learning, allowing learners to take full ownership of their study in a planned way. For Merriam and Baumgartner (2020), self-directed learning helps learners work autonomously and promotes lifelong learning habits. This pedagogy is in light as it promotes life-long learning in learners and full autonomy to learn. Lately, the importance of self-directed learning has been on the rise. Guglielmino and Long (2019) state that the adoption of self-directed learning has caused an emerging and evolving technological landscape in the world. It shows the high demand for self-directed learning in today's learning and it should be promoted. I have analyzed data in two subthemes, mainly self-directed learning of students and the promotion of teachers' self-directed professional development.

### **Students' Self-Paced Learning**

Here, I have outlined the experiences of teachers and the results that teachers analyze from their practice of flipped classrooms in their teaching careers. My participants have reported that flipped learning has shown higher applicability in our context, as students can learn autonomously. They could learn at home and in class through connected classrooms with the videos and text or other materials provided to them synchronously and asynchronously. Shalin shared:

> "Whenever I adopted this pedagogy, I have never seen students lethargic and they have zeal and are found to be learning in a selfpaced way in most of the cases. Moreover, it offered them ways to access missed classes and also cover the lessons easily on the self-pace without any disturbance as easy access is available ......"(Fieldnotes, July 2023)

Concerning this, Sam also shared: "Students' passion for learning has increased rapidly...they seem more engaged and busier than before...and they were found having same speed whenever they have time in case of boarding students too. They showed happiness in self-directed learning, which discusses in also occurs concerning previous lessons. This method has done justice to both struggling and smarter ones as both groups can speed up at their own pace."

Having heard the stories of the participants', flipped learning has been very beneficial in making use of self-directed learning, and students were found to be learning in a self-paced manner during my visit as the speed of students on lesson taught was observed not the same. This also has the alignment with (Jansen et al., 2017; Ahmad Uzair et al., 2020). I have experienced the same in many cases in my teaching, too. Whenever I adopted a flipped classroom during COVID-19, I could reflect and see their self-directed learning was encouraged as of flipped learning. I am also convinced by the idea that flipped classrooms promotes self-directed learning, as during COVID-19 it was most beneficial for my students who missed regular classes because of connectivity issues. In case of confusion and some misleading situations, students can go back and confirm it. So, I agree with the approval provided by my participants. The theory of connectivism also says it promotes self-directed learning as students can learn in a web of networks in a self-paced manner as of technology integration or on different platforms (Siemens, 2005). Likewise, self-directed learning gets justice in terms of connectivity and the web of networks, and individuals learn at a safe pace in terms of connectivity. With this connection, flipped learning as it demands technology and offers students the ability to learn in offline and online modes. So, its appliance in promoting self-directed learning is convincing. Sletten (2017). Participants have pointed out that each student is going through the videos, links, and materials provided to them and needs to speak in class, which has resulted in an increased level of child-centric pedagogy, which is aligned with the ideas of Bergman (2018) who believed that flipped learning is the concrete framework that promotes every student's participation and helps them to be active and learning a selfpaced manner. This is strongly aligned with Du, Hew, and Li (2023). The flipped classroom is more interestingly found to be providing footsteps in moving them ahead in self-directed learning for students. I also remember my classroom. Whenever I adopt flipped learning, I can see students learning independently.

A learner-friendly classroom is a situation where every material is available for students, which promotes learning goals and facilitates the accessibility of materials for student-centric pedagogy. My participants also highlighted the materials provided to them in advance are found to be relevant in strengthening learning and promoting learning goals as students are motivated, engaged and happy to be interactive. My concern was to explore how teachers perceive flipped learning in the case of students' engagement, interaction, and motivation. From this, I can conclude that flipped learning is beneficial to promoting student-centric pedagogy and teachers are happy with it as they perceive its usefulness more broadly. Here is what Medhavi shared:" This *is the best-fit self-directed learning in Nepali context as we are not fully digital and students have no reading culture." (Fieldnotes, July 2023)* 

The teacher perceived that students in flipped learning could learn at their pace and understanding level, without time limitation and fear of the teacher getting things learned in a given time. That aligns with Rodríguez-Moreno et al. (2021), who believe that students learn without being dependent on the teacher. In this reference, flipped learning seems beneficial in creating learners' autonomy as students are free to learn as of their availability of time and in a convenient way.

### **Self-Directed Professional Development of Teachers**

The purpose of this narrative inquiry was to obtain a better understanding of flipped learning based on teachers' perceptions and practices and how flipped learning is useful in increasing students' engagement, interaction, and levels of achievement, which resulted in the self-directed learning of the students Participants pointed out various ways in which flipped learning has been useful., including flipped learning, which was useful in making them more professional in the changing context of education.

The teacher is motivated to adopt flipped learning as he got involved in the professional community and knew about it. It means flipped learning is found to be useful in teachers' professional development these days as teachers are going for new pedagogy of teaching and seeking new adoption in the context where traditional teaching is not effective and is failing to make students learn in a self-directed way. Here is the sharing of Raju:

"When I adopted a flipped classroom with my little knowledge and I found it challenging in terms of content creation and models. I also find difficulties with different technologies. In my query of making flipped systematic, I joined many professional learning groups like groups of creative teachers, and teachers' professional community and I learned through them. I also learned from RELO open courses as I got to join OPEN groups where teachers from world community join and share..." (Fieldnotes, July 2023)

From Raju's sharing, it's obvious that his professional development is possible as a result of flipped learning. I, too, agree with this as I have joined several professional organizations and learned many things because of the flipped learning adventure. This pedagogy has contributed to shaping my professional career and creating my identity in the school. So I am convinced with this. This reflects that teachers' professional development is an ongoing process and happens with new pedagogies and also with changing contexts and technology (Hamdan, 2013). The constructivist theory (1987) says that learning occurs in the environment, is a social activity, and is also related to personal experience. It further matches with the theory of connectivism as it opines learning happens through the web of networks where people connect (Siemens, 2006). My teachers also said their professional development was possible because of the changing context and environment that arose as of flipped learning. Sam shared: "whatever technological competency I have ... I owe it to flipped model of teaching... otherwise I would have been in the list of crowd of teachers who need an update .....ah.. its nice for me.." (Fieldnotes, July,2023)

With this, I conclude that flipped learning has been useful in the promotion of teachers' professional development in a self-directed manner.

# Teachers' New Identity as a Facilitator

Teachers' job is to teach and bring changes. They are the drivers of education. Their role is redefined in this changing world. As of flipped learning, they have new role as facilitators because when teachers are facilitators, students take full responsibility of learning (Bergmann & Sams, 2012). I found that my participants had redefined their job as facilitators, and I could feel it during observation of their fortyminute physical classroom in the post-COVID period. From the practice of teachers, it is noted that they have found their new role in flipped learning as of more engagement of students, cooperation in learning, and their increased learning motivation, teachers have experienced their role as facilitators. Teachers also reported it even in postobservation interviews. They positively opined for their new identity creation through flipped learning. My fourth participant, Medhavi Shared her when I sat for a postobservation interview.

"They are more motivated in learning. I have also experienced my new role as a facilitator. ......besides my role as facilitator. ..... active in learning. I hope you must have noticed the second group's willingness to share ...they are more competitive...I am happy to be a facilitator as it's a present demand" (Fieldnotes, September 2023)

Likewise, Raju shared: "I love starting my lesson with discussion and group presentation as it decreases my role as a teacher and increases the role of facilitator." (Fieldnotes, September 2023)

In the same connection, Medhavi shared "This my students are free to learn at their interest and availability as per their convenience and it helps direct them to selfdirected learning." (Fieldnotes, September 2023)

From Raju's and Medhavi's sharing, it is reported that flipped learning has been useful in creating new identities as facilitators and promoting self-directed learning in students as flipped learning has opened learning opportunities at home and school. They shared that their new role is just because of the involvement of students in interaction and self-paced discussions as well as learning. This is also presented in the works of (Le Mero et al.,2022). The application of flipped learning has resulted in rewarding new roles for teachers from chalk-and-duster-carrying lecturers to a supervisor and a facilitator. While looking into the experts of teachers I also resembled my experience of having a new identity while practicing flipped classrooms during COVID-19. Some days I did not even speak for ten minutes as of their full engagement and interaction. I am with my participants experience. Even the theory of connectivism (Siemens, 2006) opines that when technology is integrated, students learn in self-paced manner and teachers have less burden as learning connectivity of webs promotes self-paced and self-directed learning. This again aligns with the idea of Hung (2017), who opines as the use of peer assignment, gamification and real-time feedback mechanisms reduces teachers' load and encourages learners' autonomy.

From the data, it was also found that teachers perceived flipped learning as a student-centric platform where students can learn in an autonomic way, and it has benefits for reducing teachers' load and increasing students' interaction and engagement for sustainable learning. On top of that, it's beneficial in reducing teachers' load and helpful in the professional development of teachers with a new adaptation. Flipped learning also paved the way for self-autonomous learning at home, as I have found teachers providing video links and other atrial uploads in different domains, such as messenger groups, LMS, and Google classrooms. By students learning and reviewing concepts at home, class time can then be freed up for active, collaborative activities within the group space and increased time with the teacher (Naibaho, 2019). Uploading of such materials also paved the way for the autonomy of learning.

While observing the class and reflecting on their practice I found that teachers were happily accepting the usefulness of flipped learning in promoting the autonomy of students learning and they are just facilitating the students and happily accepting it (Du, 2020; Zainuddin & Perera, 2019). From the practice too it was revealed that flipped learning is successful in assigning new identities to them as facilitators. I am convinced that this classroom has offered new roles to teachers, changing their roles from transmitter of knowledge to facilitators promoting self-directed autonomous learning in students. My stories to them has approval as I also learnt many things, got engaged in professional communities and kept myself strong professionally as of flipped learning. So, teachers' reflections are worth rating the usefulness of flipped learning in the promotion of self-directed learning of students as well as teachers' professional development in a parallel manner.

# **Diverse Practices**

Diverse practice refers to the various models adopted in teaching. While exploring, I found my participants have diverse practices in the case of flipped learning. This theme represents the teachers' practice and the experiences they shared during interviews and post-class observation short meetings. The theme is generated by having seen the teacher's practices in different subjects. The practices that teachers have in their classrooms are not similar to each other, and they were found to have modifications and changes based on their resources and needs of subjects and classroom and home scenarios of the students. There, I found varied practices. Shalin shared concerning my question about his classroom when I sat for the postobservation period: Shalin shared:

"I needed to assist them in mathematics and my case uploading textual content didn't help unless ...... Ever since I started involving them in group activities for discussion, ..... discussion-oriented model.... in mathematics, this model is the best one in my experience. What I did today is dominate practice for me." (Fieldnotes, September 2023) Connecting Raju's story;

'To my knowledge of flipped classroom usually provide access to learning materials like online videos, and handout puzzles the way I did today. ..... I am an English teacher, by sending some related videos, text, and URLs and requesting them to come by watching them at home..... It's very useful in my case and I dominantly adopting this way like I did today while teaching Condolence Writing "(Fieldnotes, August 2023) Standing on the point of practice. Sam's story is.

"I prefer showing some videos, and audio, or distributing small content in the class in the beginning and giving some time to students ponder on the provided content .... I am doing this because it is student-friendly and convenient as my students always may not have internet access." (Fieldnotes, August 2023)

### Medhavi's story

"I am teaching social studies and it's very diverse and vague and the right material and videos are not easily available, so I also conventionally start my lessons but I allow five minutes for self-exploration on the topic...... It has two advantages one is they are digitally sound than me and can better develop videos and slides, and secondly, they can be digitally literate and can have one level of understanding of the text or lesson (Fieldnotes, August 2023)

After listening to the stories of the four participants the way they practiced flipped learning. I could find notable variations revealed. They were going for subject-specific and content-specific models that they perceived to be best suited for them. Their practices were different from the models proposed by (Blau & Shamir-Inbal, 2017). Some of them have similar practices, too, as many provide ready-**made instructional videos.** The more dominantly discussion-led model, faux flipped learning {when students don't have access to connectivity and the school has better infrastructures) the class room is run in flipped model}, flip teacher approach, or students-oriented model micro flipping are practiced more exclusively. I observed such models while observing their class too.

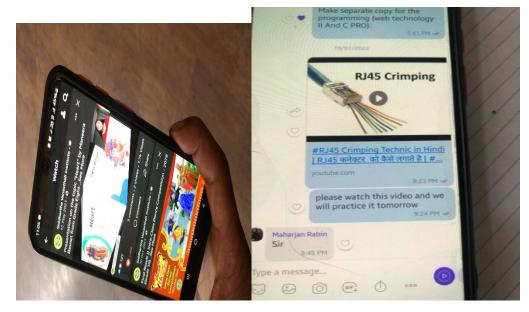
These models were found to be practiced when I visited the schools for classroom observation. The group discussion model was the most dominant one in my observation. It has coinciding findings with Hajra and Das (2015), who opined group activities in flipped learning include think-pair-sharing, immediate feedback assessment technique (IF-AT), team matrix, fishbowl discussion, three-step interview, role play, reaction sheets, affinity grouping, dyadic essays, critical debate, case study, peer editing, and group investigation and smarter app engagement and more. The most dominating were pair discussion, smarter app engagement, reactions sheets, group and group works as observed. Concerning my practice as a teacher, I also validate them all as they were most commonly used in my class. Concerning our context, where fully digital classrooms are not there, it's the best fit. I, too, had adopted such a model before, during, and after COVID-19, seeing it as a best-fit model.

The observation that I made on different bases revealed the variety of using discussion materials. The participants were found to adopt different models and trends of flipped learning. Most of them in Kathmandu Valley in elite schools were using the

seamless flipped model coined by (Hwang et al., 2015) where teachers were found to be assigning projects in LMS, Moodle, and Smarter apps of their schools. Many were found starting lessons based on students' prior learning, which was solely based on group presentation, pair work, peer assessment, and group learning tools in particular, as they had connectivity and availability of devices in most cases.

While looking at their observation practices, the dominantly seamless flipped model is used in the case of linking home assignments and classroom activities. It goes with the theory of connectivism as it opines that learning is possible and sustainable in the involvement of learners in diverse connections from school to home (Siemens Siemens, 2005). Since my school also has sound infrastructure, I have also adopted a seamless flipped model and what I practice and how I practice is reflected in the case of my participants while being there. So, I am now sure about the practice as it offers a way to fix best practices in our context.

Flipped learning has doubled up its relevance in this competitive world as flipped learning is a student-centered approach that inverts traditional lessons by providing content to students outside of the classroom that would usually be taught by the teacher at school for detailed learning outcomes (Song & Kapur, 2017). While observing the classes, it was found that three of the participants were dominantly using Flip to Learn flipped learning models as materials were purposefully provided to them to assist their learning priorly, and it aligned with the idea proposed by Chen et al. (2018). Likewise, partially, the co-regulation and co-creation model was also used by teachers as both students and teachers were found to be developing materials and presenting in class. While observing the classes, materials produced by teachers and students were seen and completely used for learning purposes, peer learning and group presentation; this has ensured learning at home and outcomes (in school). This practice matches the model Blau-Samir- Inbal practised (2017). While observing the classes, sometimes flipped learning was not found uniform, and the models and methods were modified as per the local need.



<sup>(</sup>Field Notes, 2023)

The teachers also noticed that they shared the same in post-class observation as those models do not perfectly match most of our settings and the needs of students. They found notably diversified practices of flipped models, and teachers were modifying as per the need and requirement to align with the classroom's needs. The practice of flipped learning is found to be done in aligning with the theory of connectivism as proposed by Siemens, 2006), which demands learning is possible as of connectivity and technology support. Further, this study has revealed similarities with the theory of constructivism, as learning was done based on the collaboration of teachers and students, and there was enough engagement and collaboration shown by students at large (Bishop & Verleger, 2013). Looking at teachers' practices during observation, I also remembered my classes where students were very competitive and working and collaborate in groups. I was very happy and overexcited then to adopt flipped learning as of their more encouraging discussion and participation. Seeing them fully engaged in discussion gave me a sight of happiness and pride in adopting flipped learning.

What I realized from my participants' practice was that the discussion-oriented flipped learning is most appropriate in the Nepali context, as all of the participants were found to be doing it this or that way. Some are found practicing it regularly, some on a need basis, and some at random concerning the topic and time they can allocate for preparing the materials. Since Nepal is not fully digitalized, we have not gone fully digital in the classroom setting. In the present classroom setting, teachers load and other difficult existing situations. I concluded by relying on the participant's stories. The flipped learning can be practiced keeping on the discussion model like below:

Uploading materials to the available platforms (Viber, smarter app, canvas, Google Classroom, MS, Quizzes).

Students instructed to read at home {excerpts, some journals, and other made items}

Teachers start a lesson by dividing the class into groups for discussion, starting with prior understanding of students. Students present their take in a group pair, or even individually.

Teachers deliver lessons orienting on their discussion and deliver a lesson in-depth

Finally, they conclude with group work, peer discussion, and greater involvement of students, and they wrap up the lesson.

This reflected that teachers' diverse practices contributed to approving discussion-oriented flipped classrooms in Nepali classrooms as we are still in the initial phase and not fully digitalized. I, being a teacher, too, aligned with them as flipped learning contributed to making the classroom student-centred and discussion-oriented.

Finally, after exploring the personal portrayal of the participants, starting from their origin and schooling to present conditions and turning points concerning flipped learning, I came to know how teachers adopted flipped learning in the course of changing contexts. This helped me to know their roots, as their origin and background always mattered. From my observation, it was revealed that teachers more focus was given to technology-oriented flipped learning as stress was placed on uploading videos, showing them different readymade content or teacher-made content; this has some alignment with the findings of (Shyer & Chen 2018), who proposed technologyassisted flipped learning. Since flipped learning is the newest and most innovative pedagogy in our context, more practice is done based on technological stance.

Similarly, listening to their stories, I have found that participants have gone for their gradual professional growth. They were found growing professionally and personally every day, inspired by their mission and situations they were linked up. They shared their stories so spontaneously concerning teaching and flipped learning. They developed competencies in handling technology and in the preparation of materials. Their stories vividly elucidated teachers' adventures and efforts to adopt flipped learning. While looking at the practices of teachers, there seemed similarities and differences in the models as presented by them.

So, looking at the practice of flipped learning in Nepal, flipped learning is reported as a timely approach in education. Teachers are found to be practicing spontaneously and most of them initiated it in their school from their self-motivation, interested in making them competent and more professional. Their level of satisfaction is very high. Most participants perceive and practice it positively and are very enthusiastic about this, though they have some challenges perceived during practice, and zeal was not down yet. They are now in the plan of proper practice as their schools are going to make it an innovative policy of pedagogies in their schools. They reported making it more advanced in the days to come as they completely found it to be happy and positively perceived it despite the obstacles they met.

So, this research has been helpful in making both students and teachers active learners. Moreover, this has been highly beneficial in preparing students competent with awardee of higher orders skills, demanded by 21st century education. So, flipped learning appropriateness is found timely and prevalent in Nepal's context for transformed practices in teaching-learning activities and great collaboration in learning attempts.

#### **Chapter Summary**

This chapter presented the teachers' narratives and observation notes by the researcher based on the second section of the research question (practices of flipped learning) their practice of flipped learning.

From the analysis and interpretation, I have noted that flipped learning is practiced by teachers to promote active learning and to bridge students' and teachers' self-directed learning. Moreover, it is found that flipped learning has been useful in rethinking teachers' jobs as a facilitator, and the practices were found to be diverse and subject-specific and as per the understanding of teachers.

Overall, the stories I have explored and the classes I observed reveal that teachers are positively practicing flipped learning as per the level of understanding and availability of the resources and their competencies. The practice reflects the emerging trend of flipped learning in Nepal.

### CHAPTER VII

### KNOWLEDGE CLAIMS CONCLUSION AND FINAL REFLECTION

I bring out the following claims in response to my research purpose and objectives and justify the research questions. The purpose of my research was only to explore the perceptions and practices of flipped learning in Nepal based on the experiences of secondary teachers who were adopting flipped learning in their context and as per their understanding of flipped learning. Standing on the data analysis, I revealed that my participants, the secondary teachers from elite public and institutional schools, have a very positive understanding of flipped classrooms and that they have their own level of understanding and different history of narratives. Their experiences are verisimilitude.

### **Challenges the Present Context of Nepal**

First of all, my study's first claim is that the all the new models and approaches of flipped learning is not suitable in Nepal though all the participants have practiced and perceived it with a positive notion. This implementational challenge it claimed as we don't have a fully digital context and the present workload, time and classroom settings don't incorporate all models. I have claimed that discussion-led flipped learning is the best-fit model in Nepali context. This model can redefine homework into a reading culture and develop skills like cooperation, creativity and communication. If flipped learning is to be applied in Nepal, following can be the best model to practice.

### **Discussion Model**

Step 1: Uploading materials to the available platforms (Viber, smarter app, canvas, Google Classroom, LMS, Quizzes).

Step 2: Students instructed to read do needful at home {excerpts, some journals, instructional videos and other ready-made items}

Steep 3: Teachers start a lesson by dividing the class into groups for discussion, starting with prior understanding of students. Students present their take in a group or pair or even individually

Step 4: Teachers deliver lessons orienting on their discussion and deliver a lesson in-depth

Step:5 Finally, they conclude with group work, peer discussion, and greater involvement of students and wrap up the lesson with reflection

## **Promotion of Multiple Intelligence**

My second claim is that a flipped learning has opened the door for students to explore their potential as it opens the door to knowing their learning style as it promotes multiple intelligence. All types of learners, including visual-spatial learners, picture-smart, nature-smart, word-smart, people-smart, body smart and all as purposed by(Gardener, 1999) as it opens the door for learning through videos, pictures, contexts, texts, quizzes, and real-world situations and even from audios and verbal conversations and group works. So, an adaptation of flipped learning is doing justice to all types of learners in my claim. Even constructivism demands students' direct engagement and it's reflected in flipped learning too.

### Challenge to the Concept of Schooling

Likewise, my third claim is this pedagogy has challenged the concept of schooling in Nepal as there is the mass conception that teaching and learning takes place inside the school premises, and parents have perceived that assisting a child in learning is the sole responsibility of schools. This study has challenged this concept.

## **Teachers' Professional Identity Creation**

The flipped learning gave them their own identity, found their more active students because of it, and were one step ahead of their colleagues in satisfaction and performance. Having listened to my participant's experiences and observing their practices, I come to know that they perceive flipped learning as a tool to bring effectiveness to teaching. They reported that compared to the traditional and other methods of teaching, they perceived that in flipped learning, students were more engaged, motivated, and even found very competitive among friends; they were found more cooperative, creative, and collaborative.

So, it remained a very effective tool for them to make students more competent and achieve higher as they collaborated and became actively involved in many aspects. As for their more positive perceptions towards it, they were found to be practicing it as per their understanding and awareness of it in their classrooms.

## **Advancing Technologically**

After analyzing their grand narratives and having their own stories, I felt that my participants also perceived flipped learning as a way of advancing the 21stcentury agenda. They reflected that in flipped learning, students were more engaged, competent, active, and directly involved in learning, which slowly helped them prepare for 21st-century education. They happily revealed that they had perceived it as a perfect method of advancing the 21st-century agenda in education, which is a target in every education industry, and as of having its essence in it, they were found practicing it. They were happy to share the student's involvement in studying flipped learning to the fullest extent. They shared that sometimes students were more cooperative, competitive, and even collaborative than required, in particular, from the analysis. I came to the understanding that my participants perceived that flipped learning has some implementational challenges besides its higher efficacy in student learning. They have perceived challenges from the students' side, colleagues' side, and administration's side, concerning infrastructure to connectivity and from their preparedness to parents' support and course completion to present their workload.

Besides its relevancy in uplifting students' motivation, performance, and achievement, its operational and implementational threat is also to be considered in the Nepalese context as it's a new practice in their places, and many are new and unknown about it yet. For example, they expressed the difficulty they had in implementing it properly when having a heavy workload and spending hours late at night preparing documents and difficulty uploading and preparing. They also opined for better planning and further implementation at large.

### A Support to the Policy Context

My participants' other major perception was they perceived flipped learning as a journey that led them toward digitalization. They have revealed that as of its mandatory use during COVID-19 and in the post-COVID-19 period, they have learned many things concerning technology and they can march ahead in the digital path as their competency of adaptation technology in preparing and exploring material has gone up. This has helped them to adapt easily in the age of paradigm shift in education and have happily accepted and realized the learning's essence in preparing them for the digital age and rewarding some required competencies. They have a very positive and satisfying note on the applicability of flipped learning making teachers digitally competent as per the policy demand. They shared that they learned to prepare videos, cut videos, search materials, upload materials, prepare learning management Tools, and know how to operate Google Classroom. Summing up, they have more positive and satisfying responses in connection to flipped learning.

# A Uniformly Approved Pedagogy in the Context of E-Learning

As a research quest of looking at the practice of flipped learning, I disclosed that teachers have their understanding of flipped classrooms. They are found subjectspecific in practice and have practiced as of their understanding concerning the turning point of their flipped learning. From observing their practice, what they have perceived is also found. They are found practicing flipped learning as to their perceptions, and there seemed to be uniformity in what they understood and practiced. Their understanding completely guides their practice. I have concluded that teachers have diverse practices from the practice of teachers and post-observation interview data analysis. They are found to have modifications as per the requirements, demands, and nature of subjects.

Their practices are different as math teachers use discussion-oriented type flipped learning and sometimes even have technology-enhanced practices. The materials were provided in link and text in advance and were linked in real class teaching. In the case of science teachers, the use of the flip-to-learning method was found, and students' mobilization at home was used to prepare slides, videos, and more and ask them to present. The social studies teacher was going for seamless flipping and sometimes some modifications, use of the smarter app for flipping lessons They have various practices of in materials, a selection of platforms like Google Classroom, MS. Viber groups, and some even in Facebook messengers. They were found to be practicing with and without technology as per the requirement. Some sound like they have a strong understanding of flipped, but some came to learn it while practicing.

#### A Learning Tool for Teachers and Students

During my visit, another insight I brought was from the practice of teachers, flipped learning is understood as an active learning tool. During the visit, students were found to be actively engaged in classroom activities. They were presented in groups, discussed in groups, and even busy in pair work, and they looked very competitive during classes. The same thing was uttered by teachers in postobservation interviews. So, flipped learning in our setting is found to be more engaging in nature, which has resulted in students' active learning because of their motivation, full cooperation, and enthusiastic learning motive, besides some implementational challenges that teachers have perceived. For reference, the math teacher was having his trigonometry lesson during my visit. Students were divided into four groups, and they were fully engaged and very active, even requesting the teacher to wait for further discussions in their group. It also promoted self-regulation in students, and they were found to take complete charge of their learning, even in a competitive way. I claim that flipped learning was fruitful in the Nepalese context for making students learn actively, and of course, it has contributed to the performance of the students and uplifted teachers' and students' competencies as required in this modern era.

# **Self-Regulated Learning**

The other claim I present from looking into the practice of teachers and from their narratives is that flipped learning is a way that shapes students' self-regulated learning as students can reflect on their learning anytime and can go for relearning as per the requirement and can have adjustments as needed. It's seen as useful as students can learn in a self-paced manner and support their learning anytime with the help of videos and other materials without teachers' support. So, flipped learning is found to be a best-suited practice in the Nepal context, too, as many attempts have been made to have students achieve more, which can be done through flipped learning.

### **Innovative Pedagogy and Personal Self-Satisfaction**

From traditional teaching methods to technology-supported learning, it is positively affected teachers in developing self-satisfaction. It was also reported that the teachers had a kind of deficit understanding of what they were doing in teaching. Still, after their use of the flipped method, they reported that they had developed higher levels of confidence, satisfaction, and motivation.

#### Conclusion

The purpose was to explore the perceptions of secondary-level teachers on flipped learning in Nepal, and I sought the teacher's perceptions and real practices in their context.

In a nutshell, teachers have more positive perceptions regarding the flipped learning as they have benefited much from this practice. They have created new identities and found substitutes for their workload. While pointing out the benefits to students, they have seen its usefulness in making them learn perfectly, increasing motivation to grow in a digitalized age, a door to open their achievement, and relevancy of ensuring students' engagement and participation in learning. They have realized the flipped classroom's relevancy in this digitalized context as it creates new identities and roles for teachers, students, and parents and also opens the gate for digitalized learning. The teachers have reflected this approach as an active learning tool as it promotes students' creativity, engagement, and cooperation. when it comes to their practices in real classrooms, the study showed that their practices have variations concerning the context, knowledge of teachers' availability of the resources in schools, and financial conditions that schools outline.

Moreover, the study concluded that teachers' practices are inclined towards implementing such constructivist theories of learning by emphasizing group sessions and letting students direct the classroom in a more organized way. To conclude, by incorporating all the models and strategies and the contents that are relevant and appropriate for the learners' level, providing more materials and creating a learning environment promoted active learning of the students on the one hand and on the other hand, it has bridged the teachers' competencies to the digitalized context and created new horizons of teaching. Flipped learning is seen as beneficial in promoting constructivist teaching -learning as it demands a web of networks and direct engagement of learners in teaching as purposed by the theory of the connectivism and constructivism.

However, difficulties, hours of workload, cooperation from students, colleagues' parents, connectivity, and resources were notably hindering the practices, yet they were fully committed to continuing them. On the one hand, flipped learning contributes to the development of student autonomy, self-learning, and learning engagement; on the other hand, the success of this practice depends on active lesson plans, cooperation in sharing and learning the responsibility of students, and proper alignment of flipped materials to learning outcomes by the teachers as well as infrastructures set -up and reduced the workload of the teachers. This contradicts the theory of connectivism, which demands sound technology and peoples' interactions in a web of networks. To realize the worth of flipped classrooms, educational institutions need to continuously educate both students and teachers about the potential benefits of this approach and should have a specific plan. As this research focuses only on teachers' perceptions at a secondary-level school, there is a scope for future research covering the students and teachers of other specializations to draw a general understanding and further benefits and accomplishments in this arena more extensively.

To be critical, my findings contradict other findings that I presented above, as many participants were found to have diverse practices, and no uniform practice was found. Promoting multiple intelligences and challenges to the present concept of schooling are worthy. Flipped learning is found to be used with and without technology with the help of available resources and the models that fit right for them.

To sum up, I found that the teachers perceive flipped learning very positively, even though they have faced challenges in its practice. It's very beneficial in both the teaching and learning process. The teachers and students benefitted much from its practice, as both students and teachers benefitted. Thus, in this present era, teachers need to learn and implement this pedagogy in schools as the world is changing and jumping into the web of networks, as opined by the theory of connectivism and its time of student-centeredness where student-centeredness is sought. Flipped learning is also perceived and practiced by teachers as it promotes constructivist learning.

#### Implications

This study has presented a wide range of implications for teachers, school managers/leaders, students, policymakers, and future researchers in a broad spectrum since it's a new and timely concern and the most talked about issue in the international community and its relevancy in Nepal too reflected in teachers' perception and from their practice.

The most beneficiaries projected by this study are teachers, as flipped learning has been beneficial in the professional development of teachers, as they have learned many things from it. Flipped learning also remains beneficial in the skill enhancement of teachers as they need to work with technology and learn the newest and most innovative ways of connecting to it. Furthermore, it's very implacable to teachers as they have to work with technology and preparation of materials and exploration. Its practice can make them more technologically competent and have sound knowledge. So, it's very necessary and timely to bring pedagogy, and every teacher should adopt it to have sound knowledge of technology, speedy professional development, and further enhancement of the skills a 21st-century teacher requires in this era.

Secondly, the implication of flipped learning is seen for school managers/leaders as they can establish interactive learning environments by having flipped learning as the uniform pedagogy in their schools. They can also create selfregulated learning for students to have connections at home and in school. This seemingly remains relevant for them to connect parents to their child's learning. Moreover, flipped learning is implacable for school leaders as they can develop institutional strength in using technology in education with uniform practice, contribute much in the field of education, and set an example for others. This study has put forth the numerous implications for school leaders as required in this competitive world.

Thirdly, the implications of this study also go for the policymakers as it can be a reference for them to develop ICT-mediated learning education policies in the future and have some remarkable changes in education with prompt integration of pedagogies and policies in practice. This study has further provided the pathways for integrating flipped learning in all forms of change initiatives and going for remarkable performance in the field of education to meet the expected targets at large. This study has provided insight into parents' rethinking their responsibilities towards their child's learning process.

Finally, the findings of this study lay a solid foundation for future research on flipped learning. Furthermore, flipped learning has created exciting opportunities for future researchers to unfold the newest and most innovative teaching practices and technologies that can uplift the learning experience for students on a large scale in the future. In addition, researchers in this field can further study how flipped learning systematically impacts teachers' instructional practices. Lastly, the role of flipped learning remains crucial to uplifting the educational standard and learning achievement in Nepal. The findings emphasize the importance of flipped learning in advancing reading and directing it to technological transformation as well as the holistic development of teaching-learning activities.

#### **Final Reflections**

In My research journey, I was fully driven by my own experience as I have been involved in teaching since 2009. In visiting literature, I noticed a gap in the existing literature and coined a research question that I was interested in exploring and was the must-do part in the teaching field. I spent much time exploring the existing literature and developing my research proposal as I was highly motivated to explore flipped learning. After defending my proposal and going through all the requirements, I carried on my research journey, which involved data collection through interviews. I also closely observed the practices of flipped learning in Nepal as required.

During this long process, I encountered many challenges and shortcomings, such as difficulty in finalizing participants and managing and processing data, which included a rigorous process. However, I had kept hope and found ways to face the challenges. Once I had data, I spent significant time analyzing it and processing and finalizing it to answer my research questions. This stage was adventurous and challenging, but I collected the courage to use appropriate tools and interpret and analyze the results as required and demanded. After analyzing my data, I categorized my findings into different themes, discussed the implications of my research with relevant literature, and tried to identify new areas for future study. I honestly reflected on my research journey as a whole and considered how my findings could adjust to a broader spectrum of education, particularly in teaching-learning activities.

Throughout my research endeavour, I was conscious of my assumptions and limitations. I constantly sought feedback from peers and experts in my field when required. The limitations of research can't be generalized as it differs in process, is methodologically too diverse as it offers a diverse context, and the findings are generic, focused, and limited to the context in which they belong and the perspective they have.

I found this journey helpful in sharpening my knowledge and learned a lot from it. I am happily advocating and accepting the impact that my research has had on education. At large, carrying research is a challenging yet rewarding journey full of adversities that demand patience, persistence, curiosity, and a willingness, readiness, and passion to learn and grow competitively consistently. Reflecting at each stage of the process is mandatory as identification of such areas paved the way for improvement and ensured the research journey was a blend of rigorous, ethical, and impactful processes.

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## APPENDIX 1 MY REFLECTIONS ON SCHOOL VISIT

It was from June to September 2023 and immediately after having my proposal defended, I visited four different schools of Pokhara and Kathmandu. I didn't find many similarities among the schools I visited. Their difference was in elatedness the facilities offered and the physical environment that exists. I chose the schools purposefully based on their relatedness and hope for innovative practices, as both of the cities are known as the education hub of the country. I was joyful seeing the infrastructure of the schools. The teachers also looked very smart. When I reached the gate of one of the schools in Kathmandu, I got overwhelmed seeing the big display board where daily information's was shown. I proceed with the hope of getting everything right. When I reached the second school, I was happy to see my participants who had come at the gate right from class to receive me. Seeing him with a laptop gave me pleasure and when he took me to the lab's lobby, I was having goosebumps as of happiness seeing the innovative setting and materials and setting in lab which was designed for learning purpose.

Similarly, when I left for early morning to third school of Kathmandu as communicate with my participants. I booked Patho and travelled with hope of no rain. Unfortunately, it rained so heavily and I got all wet as of heavy rain. I left pathoo on the way to my school site and entered a shop for buying clothes as I was not in the situation to go to the school. After changing the new bought clothes and after almost two hours wait. The rain stopped and I reached my site. I could see my participants from far away waiting at the roundhouse (golo ghar) which is also called air house (hawa ghar) as many students and teachers sit there and get fresh air. There too I got a warm reception and I also got good responses from school authorities as I had sent them my purpose of visit in the email priorly and it continued till I saturated my data.

My data collection journey was like a roller coaster when I planned to visit the last school in Kathmandu. I used a taxi and it was ignorant of my location and I was dropped at a 12 km away venue as I was not able to locate the school well. However, besides the ups and downs in the travel schedule, my entire data collection process and fieldwork was notably worthwhile. I got full support from the authority concerned

at the gate, administration and of course from my participant's side. My participants remained highly supportive and even tried to be informal often. I had long and prolonged engagements sometimes on their request too.

I was sometimes strike by the homely environment of the school where full autonomy was given to teachers and students. Most of the schools were having really a good school culture and climate. The classrooms looked quite organized and student centered ,Not only in my observation but also in some other non-participating teachers were found going for flipped classroom as I could see it while passing by .In some of the schools ,headteachers themselves were found to be advocating for flipped classroom and even I had a long and interactive sessions even with principals .The thing I was overwhelmed by seeing at the site is the classroom of my participants Technophile which was indeed a technologically rich and alluring from practice and setting perspective

To sum up, where ever and whichever schools I reached for my research journey, I found the best scenario of flipped classroom, The level of understanding of all concerned to it was awesome. However, they had some misleading experiences in the past and I was happy to know that many schools h have kept of this in their school development plan.

My researching journey in a nutshell is like a roller coaster as of rainy season and a bed of rose from reception perspective. The zeal and spontaneity of the participants was overwhelming.