EXPLORING PROJECT-BASED LEARNING: EXPERIENCES FROM KATHMANDU METROPOLITAN SCHOOLS

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A Dissertation

Submitted to
School of Education

in Partial Fulfillment of the Requirements for the Degree of
Master of Philosophy in Educational Leadership

Kathmandu University
Dhulikhel, Nepal

August 2026

AN ABSTRACT

of the dissertation of *Mani Ram Ghimire* for the degree *Master of Philosophy in Educational Leadership*, presented on *25 August 2026*, entitled "*Exploring Project-Based Learning: Experiences from Kathmandu Metropolitan Schools."*

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Project-Based Learning (PBL) is a student-centered and inquiry-based approach to teaching and learning that provides opportunities for students to work together, investigate meaningful questions and problems, apply knowledge to real world situations and construct understanding through practical experiences. In Nepal, growing emphasis on student-centered, experiential and competency-based education has created an increasing interest in PBL. Though, limited contextual study has examined how teachers experience and interpret the implementation of PBL on their everyday classroom practices, particularly in relation to student's participant, motivation and engagement. Thus, this study explored teachers lived experiences of implementing PBL in secondary level classrooms in selected Kathmandu Metropolitan schools.

The study employed a qualitative methodology within an interpretivist paradigm and used hermeneutic phenomenological approach to examine teachers lived experiences of implementing of PBL. Six teachers from selected institutional schools in Kathmandu Metropolitan City participated in the study through purposive selection based on their experience of implementing PBL. Information was generated primarily through semi-structured in-depth interviews and were analyzed thematically through an inductive process informed by hermeneutic phenomenological interpretation. Experiential Leaning theory (ELT) provided the theoretical lens for

interpreting teachers experiences in relating to experience, reflection, understanding and application.

The findings indicated that teachers experienced PBL as a purposeful, authentic, collaborative and contextually situated approach to teaching and learning. Teachers emphasized the importance of aligning projects with curriculum and learning, outcomes, considering students understanding and readiness, facilitating participation, providing scaffolding, balancing student autonomy with appropriate guidance and responding to diverse learning needs. Teachers also perceived that meaningful projects, real-world connections, collaboration, students' choice and active participation created opportunities for students' interest, motivation and engagement. At the same time teachers' experiences were shaped by professional confidence, collaboration with colleagues, institutional support, available resources, curriculum demands and local cultural contexts. Teachers described adapting their PBL practices according to students' needs and classroom situations rather than following a single fixed approach.

The study concludes that the meaning of PBL implementation in the selected Kathmandu Metropolitan school is closely connected with the teachers' ongoing experiences of planning, facilitating, adapting, reflecting and learning from classroom practice. Through the lens of ELT, PBL can be understood as an experiential and context-responsive pedagogical practice that creates opportunities for meaningful participation, motivation and engagement while also requiring appropriate teacher preparation, collaboration, institutional support and contextual adaptation. The results provide context specific insights for teachers, school leaders, educators, curriculum developers and educational policymakers interested in strengthening PBL practices in Nepalese school education.

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शोध सार

शैक्षिक नेतृत्वमा दर्शनशास्त्रको स्नातकोत्तर उपाधिका लागि मणि राम घिमिरेको शोध प्रबन्धको शीर्षक "परियोजनामा आधारित सिकाइको अन्वेषण: काठमाडौं महानगरपालिकाका विद्यालयहरूबाट प्राप्त अनुभवहरू" ९ भदौ २०८३ मा प्रस्तुत गरिएको थियो।

.....

उप. प्रा. श्रीकृष्ण वाग्ले, पीएचडी

शोध निर्देशक

परियोजनामा आधारित सिकाइ (PROJECT BASED LEARNING – PBL) विद्यार्थीकेन्द्रित तथा अन्वेषणमा आधारित शिक्षण – सिकाइको एक पद्धति हो। यसले विद्यार्थीहरूलाई सामूहिक रूपमा कार्य गर्ने, अर्थपूर्ण प्रश्न तथा समस्याहरूको अन्वेषण गर्ने, ज्ञानलाई वास्तविक जीवनका परिस्थितिहरूमा प्रयोग गर्ने र व्यावहारिक अनुभवमार्फत आफ्नो बुझाइ निर्माण गर्ने अवसर प्रदान गर्दछ। नेमालमा विद्यार्थीकेन्द्रित, अनुभवमा आधारित तथा दक्षतामूलक शिक्षामा बढ्दो जोडसँगै परियोजनामा आधारित सिकाइप्रति चासो पनि बढ्दै गएको छ। तथापि, विशेषगरी विद्यार्थीको सहभागिता, उत्प्रेरणा तथा सलग्नतासँग सम्बन्धित पक्षहरूमा शिक्षकहरूले आफ्नो दैनिक कक्षाकोठाको अभ्यासमा परियोजनामा आधारित कार्यान्वयन गर्दा कस्ता अनुभवहरू प्राप्त गर्छन् र त्यसलाई कसरी अर्थ्याउँछन् भन्ने विषयमा सन्दर्भगत अध्ययनहरू सीमित छन्। यसै सन्दर्भमा, यस अध्ययनले काठमाडौं महानगरपालिकाका छनोट गरिएका विद्यालयहरूको माध्यमिक तहका कक्षाकोठामा परियोजनामा आधारित सिकाइ कार्यान्वयन गर्दाका शिक्षकका जीवन्त अनुभवहरूको अन्वेषण गरेको छ।

यस अध्ययनमा शिक्षकका जीवन्त अनुभवहरूको अध्ययन गर्न व्याख्यावादी (INTERPRETIVIST) प्रतिमानअन्तर्गत गुणात्मक अनुसन्धान पद्धति अवलम्बन गरी व्याख्यात्मक घटनावैज्ञानिक (HERMENEUTIC PHENOMENOLOGICAL) उपागम प्रयोग गरिएको थियो। काठमाडौं महानगरपालिकाभित्रका छनोट गरिएका संस्थागत विद्यालयहरूमा परियोजनामा आधारित सिकाइ कार्यान्वयनको अनुभव भएका छ जना शिक्षकलाई उद्देश्यपूर्ण छनोट विधिमार्फत अध्ययनमा सहभागी गराइएको थियो। मुख्य रूपमा अर्धसंरचित गहन अन्तर्वार्तामार्फत सूचना सङ्कलन गरिएको थियो। सङ्कलित सूचनाको व्याख्यात्मक घटनावैज्ञानिक दृष्टिकोणबाट निर्देशित हुँदै आगमनात्मक प्रक्रियामा आधारित विषयगत विश्लेषण गरिएको थियो। अनुभवात्मक सिकाइ सिद्धान्त (EXPERIENTIAL LEARNING THEORY –ELT) लाई शिक्षकका अनुभवहरूलाई अनुभव, चिन्तन, बुझाइ तथा प्रयोगका आयामहरूसँग जोडेर व्याख्या गर्ने सैद्धान्तिक आधारका रूपमा लिइएको थियो।

अध्ययनका निष्कर्षहरूले परियोजनामा आधारित सिकाइलाई शिक्षकहरूले उद्देश्यपूर्ण प्रामाणिक सहकार्यमा आधारित तथा सन्दर्भसापेक्ष शिक्षण –सिकाइको पद्धतिका रूपमा अनुभव गरेको देखाएका छन्। शिक्षकहरूले परियोजनालाई पाठ्यक्रम तथा सिकाइ उपलब्धिसँग आबद्ध गर्ने, विद्यार्थीको बुझाइ र सिकाइ तत्परतालाई ध्यानमा राख्ने, सहभागितालाई सहज बनाउने, आवश्यक सहयोग तथा मार्गदर्शन प्रदान गर्ने, विद्यार्थीको स्वायत्तता र उपयुक्त शिक्षक निर्देशनबीच सन्तुलन कायम गर्ने तथा विविध सिकाइ आवश्यकताहरूलाई सम्बोधन गर्ने कुरामा जोड दिएका छन्। त्यसैगरी शिक्षकहरूले अर्थपूर्ण परियोजना, वास्तविक जीवनसँगको सम्बन्ध सहकार्य, विद्यार्थीको छनोट तथा सक्रिय सहभागिताले उनीहरूको रुचि उत्प्रेरणा र सिकाइमा संलग्नता अभिवृद्धि गर्ने अवसर सिर्जना गरेको अनुभव गरेका छन्। साथै परियोजनामा आधारित सिकाइ कार्यान्वयनका क्रममा शिक्षकहरूको व्यावसायिक आत्मविश्वास, सहकर्मीसँगको सहकार्य, संस्थागत

सहयोग, उपलब्ध स्रोतसाधन, पाठ्यक्रमका माग तथा स्थानीय सांस्कृतिक परिवेशले महत्वपूर्ण प्रभाव पारेको देखिएको छ। शिक्षकहरूले एउटै निश्चित ढाँचा अनुसरण गर्नुभन्दा विद्यार्थीका आवश्यकता र कक्षाकोठाको परिस्थितिअनुसार आफ्ना परियोजनामा आधारित सिकाइका अभ्यासहरूलाई अनुकूलन गर्दै आएको अनुभव व्यक्त गरेका छन्।

यस अध्ययनले काठमाडौं महानगरपालिकाका छनोट गरिएका विद्यालयहरूमा परियोजनामा आधारित सिकाइ कार्यान्वयनको अर्थ शिक्षकहरूले कक्षाकोठाको अभ्यासमा निरन्तर रूपमा योजना निर्माण गर्ने सहजीकरण गर्ने अनुकूलन गर्ने चिन्तन गर्ने तथा अभ्यासबाट सिक्ने अनुभवसँग घनिष्ट रूपमा सम्बन्धित रहेको निष्कर्ष निकालेको छ। अनुभवात्मक तथा सन्दर्भअनुकूल शिक्षण अभ्यासका रूपमा बुझ्न सकिन्छ जसले विद्यार्थीको अर्थपूर्ण सहभागिता उत्प्रेरणा तथा सिकाइमा संलग्नताका अवसरहरू सिर्जना गर्दछ। यद्पि यसको प्रभावकारी कार्यान्वयनका लागि शिक्षकको उपयुक्त तयारी सहकार्य संस्थागत सहयोग तथा सन्दर्भअनुकूलन आवश्यक हुन्छ। यस अध्ययनको निष्कर्षहरूले नेपाली विद्यालय शिक्षामा परियोजनामा आधारित सिकाइका अभ्यासहरूलाई सुदृढ बनाउन इच्छुक शिक्षक, विद्यालय नेतृत्व, शिक्षाविद् पाठ्यक्रम विकासकर्ता तथा शैक्षिक नीतिनिर्माताहरूका लागि सन्दर्भविशिष्ट अन्तर्दृष्टि प्रदान गर्दछ।

..... ९ भदौ २०८३

मणि राम घिमिरे

उपाधि उमेदवार

This dissertation entitled "*Exploring Project-Based Learning: Experiences from Kathmandu Metropolitan Schools"*, presented by *Mani Ram Ghimire* on *25 August 2026.*

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

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Mani Ram Ghimire
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DECLARATION

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

…… 25 August 2026

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DEDICATION

This dissertation is dedicated to my parents, family members, teachers and friends whose inspiration, encouragement and belief made me what I am now.

ACKNOWLEDGEMENTS

In my journey of dissertation writing, teachers from the school of Kathmandu Metropolitan City were the key people who helped me in developing the final version of dissertation. So, I want to thank everyone who helped with this dissertation, either directly or indirectly.

I want to thank my supervisor from the bottom of my heart for pushing me to do the study by giving me helpful advice, suggestions, support, instructions, and help throughout the whole process. He gave me the tools I needed to finish this research, and I owe him a lot.

I would also like to thank Prof. Bal Chandra Luitel, PhD, Dean of Kathmandu University School of Education, for being a good mentor and supporting me. His prompt help made this research study possible. It was very nice of him to encourage me while I worked. I really like how he works with me and research scholars.

I want to thank Asst. Prof. Basu Prasad Subedi, PhD, Head, Department of Educational Leadership, for all the help, guidance and support he has given me during my research writing. His immense guidance made me reach this level. I want to thank Asst. Prof. Shree Krishna Wagle, PhD, my dissertation supervisor from the bottom of my heart. His constant support, guidance and mentorship helped reach this level of information management. This research has made full use of his knowledge. I want to thank Assoc. Prof. Shesha Kanta Pangeni, PhD, Assoc. Dean, Kathmandu University School of Education, for all the help and support he gave me during research writing. I am very grateful to all the members of the research committee for their ideas, advice and helpful critical comments.

I would also like to thank Prof. Dhanapati Subedi, PhD, from the bottom of my heart for all the help and support he gave me while I was working on my dissertation. I am also obliged towards Asst. Prof. Rebat Kumar Dhakal, PhD, whose helpful comments, suggestions and regular help as an internal reviewer made it such easier for me to write this dissertation. I also want to thank Noor Jung Shah, PhD. and Narayan Shrestha, from Writing and Communication Center (WCC), for helping me with all the APA formatting, language editing, recommendation and other necessary writing areas which I needed. I am very grateful to Chandra Bhushan Yadav and Hira Lal Kapar from Research and Innovation Center (RIC) for their help and advice. I

want to continually thank all my friends from Continuing and Professional Education Center (CPEC), for their unyielding wish which made it much easier for me to write my dissertation. I want to thank Lokendra Karki for his relentless support and arrangement and motivation while writing this dissertation. I would be remiss if I did not acknowledge Raju Maharjan, whose knowledge and expertise were incorporated and fully utilized when preparing the hard copy of this dissertation.

I also want to thank my family members who have always been there for helping me with my work. I want to thank my wife, Radha Timalsena, for all the ways she has made my work less stressful by being brave, patient and helpful. Rhythm and Rhyshab, my two sons, have also helped me a lot with my work. They gave up my love and care while I was studying. And I will always remain beholden with my creator/parents for making me who I am today.

Finally, I extend my sincere gratitude to both known individuals and the unnamed contributors who, either directly or indirectly, assisted and supported during the composition of this dissertation.

Mani Ram Ghimire
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ABBREVIATIONS

ABI	Activity-Based Instruction
CAIE	Cambridge Assessment International Education
CBL	Competency-Based Learning
CDC	Curriculum Development Center
CPEC	Continuing and Professional Education Center
ELT	Experiential Learning Theory
IB	International Baccalaureate
IPC	International Primary Curriculum
ISA	International School Award
ISA	International School Award
KUSOED	Kathmandu University School of Education
M & M	Monitoring and Mentoring
MYP	Middle Year Program
NEP	National Education Policy
NCF	National Curriculum Framework
NGDO	Nonprofit, Non-Governmental Development Organization
PBL	Project-Based Learning
PYP	Primary Year Program
Q&A	Question and Answer
REC	Research and Communication Centre
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering, Mathematics

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CHAPTER I
INTRODUCTION

Chapter Overview

This chapter introduces the study on teachers' experiences of implementing project-based learning (PBL) in secondary level classrooms in Kathmandu Metropolitan schools. It begins by presenting the broader educational context and the emergence of student-centered pedagogies, followed by an overview of PBL and its relevance to contemporary teaching and learning. The chapter then discusses PBL in the Nepalese educational context and introduces the specific research context. Subsequently the statement of the problem, purpose of the study, research questions, rationale and significance, conceptual clarification and delimitations of the study are presented. The chapter concludes by providing a summary of the major issues discussed.

Setting the Scene

Education in the twenty-first century has increasingly emphasized learning approaches that actively involve learners in constructing knowledge, solving problems, collaborating with others and applying knowledge to meaningful situations. This shift reflects a border movement from predominantly teacher-centered approaches towards learner-centered pedagogies in which students are expected to participate actively in the learning process.

Such a shift has also influenced teachers' roles. Rather than functioning primarily as transmitters of information, teachers are increasingly expected to facilitate learning, scaffold students' inquiry, encourage collaboration, provide meaningful learning experiences and support students in applying knowledge beyond routine classroom exercise. Their changing expectations have increased interest in pedagogical approaches that connect classroom learning with authentic experiences. Study shows that students engaged and motivated to develop qualities while at learning platforms like inside and outside the classroom (Hall & Miro, 2016). This is really the best strategy in K-12 teaching and learning because learners invest considerable effort in mastering something and take ownership of their learning path. Project-Based learning (PBL) is one such approach. Its emphasis on inquiry, collaboration, practical engagement, learner responsibility and the creation of

meaningful outcomes make it relevant to educational contexts that seek to promote active and engaged learning. However, Implementing PBL involves more than assigning students projects. It requires teachers to interpret and adapt to PBL principles within the realities of their classroom, schools, available resources, assessment practices and students' learning needs.

It is with this broader educational transformation that the present study is situated. The study focuses on teachers' experiences of implementing PBL and basically on their experiences of students' participation and their perceptions of students' motivation and engagement.

Background of Study

The nature of teaching and learning has been changing in response to the demands of a rapidly evolving world. Contemporary education increasingly emphasizes the development of learners' abilities to apply knowledge to real-world situations rather than limiting learning to the acquisition of theoretical information. In this context, inquiry-based and interdisciplinary approaches have gained increasing attention because they provide opportunities for learners to explore problems, connect knowledge across different areas and develop practical skills. In Nepal inquiry-based education has been associated with the integration of Science, Technology, Engineering, Arts and Mathematics within teaching and learning practices (Koirala & Neupane, 2023). Such an orientation recognizes the importance of enabling learners to identify and utilize diverse sources of knowledge and to apply what they learn to real-world challenges. Through such approaches learners can develop reasoning, problem-solving, cooperation, creativity and other skills considered important for learning and work in the twenty-first century.

The changing nature of education also creates opportunities to connect formal classroom learning with Nepal's rich cultural and technological heritage. Traditional technical skills and practices, including the making and use of Dokos, Jantos, Ghattas and Dhikis represent forms of practical knowledge embedded within Nepalese communities. Bringing such culturally relevant knowledge into learning activities can provide opportunities for students to connect classroom learning with their culture heritage while simultaneously developing practical and problem-solving skills.

The changing expectations of education have contributed to greater emphasis on learning-centered pedagogies. Such approaches position learners as active participants in the learning process and provide opportunities for them to intestate

issues, engage in practical activities, collaborate with others, apply knowledge and construct understanding through experience. Inquiry-based and hands-on learning approaches are particularly relevant to this orientation because they enable learners to engage in meaningful tasks rather than learning only through theoretical instruction. Within this perspective thatcher's roles also extend beyond the transmission of information. Teachers may facilitate learning by providing meaningful tasks, guiding inquiries, supporting collaboration and creating opportunities for learners to apply their knowledge in practical situations.

In the Nepalese context, such an approach can also provide opportunities to integrate students' real-life experiences and cultural knowledge into classroom learning. For example, students may be engaged in activities related to the design and construction of a traditional Nepali basket or a water carrier. Such activities help learning to correlate with students' daily lives and cultural environment fostering creativity, problem-solving, collaboration and developing practical skills.

The shift towards student-centered teaching approaches can be explored within this larger movement towards inquiry-based learning, experience-based learning and student-centered instruction. PBL enables students to explore a challenging meaningful problem, apply knowledge, collaborate with peers and produce functional results. That is why facilities engender theoretical learning through hands-on practice and action. Within Nepalese contexts, PBL has been seen to sum up the more inquiry-oriented and STEAM-based kinds of student learning (Koirala & Neupane, 2023). Through such integration, learners can engage in innovative and creative activities while developing practical life skills. The practical orientation of PBL is also supported by the possibility of connecting learning activities with real-life situations. Rather than learning concepts theoretically, students can apply knowledge through activities that require them to investigate, design, create, solve problems and reflect on their work. Granado-Alcón et al. (2020) emphasize the significance of PBL to enable learners acquiring knowledge through practical experiences instead of merely theoretical learning.

Within Nepal, the approach may therefore be adapted to local contexts and students lived experiences. Projects involving the design of construction of culturally familiar objects such as a traditional Nepali basket or a water carrier can provide opportunities for students to explore cultural knowledge while developing practical and problem-solving skills. Such possibilist indicate that PBL can provide a

meaningful connection between classroom learning, students' experiences, cultural heritage and the development of contemporary competencies.

One of the important features of PBL is its potential to involve learning actively in the learning process. By engaging students in meaningful projects and practical tasks, problem-solving, creation and knowledge application. These experiences are closely connected with the development of competencies commonly associated with twenty first century learning, particularly the four Cs: critical thinking, creativity, collaboration and communication. The emphasis on active participation is particularly relevant to the present study because PBL changes the nature of students' involvement in classroom learning. Students are not merely expected to receive information; they may be required to contribute ideas, work collaboratively, make decisions, perform practical tasks and take responsibility for aspects of their learning. Teachers consequently may develop perceptions of students' participation and involvement during project activities.

PBL may also create learning conditions that influence students' motivation and engagement. Meaningful tasks, connections with real-life experiences, opportunities for creativity, collaboration and the production of tangible outcomes may encourage students to become more involved in learning. However, motivation and engagement are related but distinct concepts and teachers' perceptions of students' motivation may not always be identical to their observations of students' actual engagement in learning activities.

Therefore, the relationship between PBL student participation, motivation and engagement warrants attention within the context in which PBL is implemented. In the present study, these dimensions are considered from the perspectives of teachers who have experience of implementing PBL in their classrooms. Examining their experiences can provide insight into how PBL is enacted in practice and how teachers interpret students' participation, motivation and engagement during PBL activities.

Project-Based Learning: Concept and Characteristics

Project Based Learning (PBL) is a student-centered, inquiry-based instructional way in which students gain knowledge and skills by investigating problems, issues, or questions over an extended period of time by designing, creating, and implementing projects. It encourages active learning by doing, cooperative collaboration and inquiry, problem-solving, reflective learning and knowledge coalescence. Learners are not just passive recipients of information, but rather

actively participate in identifying issues, decision-making activities and communications with others, and taking responsibility of their own learning process. In this way, PBL can help students learn how to relate classroom learning to the outside world and become independent learners.

PBL is also closely associated with the development of twenty first century (C21) skills including communication, collaboration, critical thinking, creativity as well as problem solving and self-direction (González-Pérez & Ramírez-Montoya, 2022). Kennedy and Sundberg (2025) identified that student centered learning is achieved using PBL, where students are required to work together and explore a meaningful project in their own (student centered learning). In a similar manner, Purnamawati and Sukinah (2025) elaborate that PBL concerned with equal opportunity in exploring real problems, collect knowledge, inquire, and experiment to produce new creative ideas. In an inclusive classroom, such an approach can provide opportunities for students with diverse abilities and perspectives to contribute to knowledge construction and develop their potential.

Based on these perspectives PBL in the present study is understood as an inquiry based and student-centered learning strategy in which students investigate real world questions and problems, collaborate with others, construct knowledge and develop practical solutions through meaningful project activities.

The literature indicates several core characteristics that distinguish PBL from conventional classroom instruction. First, PBL is student centered, as students actively participate in planning, investigating, decision making and completing project tasks. Second, it is inquiry based requiring learners to ask questions, investigate issues, gather information and develop explanations or solutions. Third, PBL allows for social interaction or collaborative learning in which students collaborate to achieve a common outcome. Fourth, PBL is connected to real and authentic contexts so learners may draw lessons from what they learn to practical contexts, where knowledge and skills are then put into practice. Further, PBL develops learner autonomy and skills needed for twenty first century like problem solving and self-direction (Gonzalez-Perez & Ramirez-Montoya, 2022; Kennedy & Sundberg, 2025). There is also anecdotal evidence that PBL can increase students' motivation and engagement. For example, Sharma (2023), in this study conducted with fifteen students of two different public schools in Pokhara, found that PBL enabled them to develop their motivation and freedom in their thinking. This is

consistent with Kember (2009), who found that learners may be motivated in non-PBL classrooms if they can see how their learning relates to their future academic pursuit or professional careers. They can learn meaningfully in PBL classrooms.

The growing interest in active and PBL approaches can be seen evidently in the context of Nepal too. KUSOED is promoting PBL and has been supporting teachers of schools inside Kathmandu Metropolitan City through various training programs and workshops since 2024. My direct involvement as a teacher educator in this training provided an opportunity to observe teachers' engagement in collaborative learning, project planning, goal setting, task allocation and project implementation. Similarly, Giri (2016) reported limitations in students' enthusiasm, demonstration of learning and self-drive in traditional lecture-based classrooms and recommended learning environments that provide greater opportunities for cooperation and active participation.

PBL should not be understood simply as assigning students a project at the end of a lesson or asking them to develop a particular project. Ordinary project work may be teacher directed, limited in duration, focused primarily on completing an assigned task and used mainly as an activity to demonstrate previously learned content. In contrast, PBL represents a broader pedagogical approach in which the project itself becomes a context for learning. In this approach, learners generally start with a simple meaningful query, challenge or problem related to the real world. They further get engaged in the problem, collaborate with their colleagues, investigate, make decisions, construct knowledge, revise and reflect during the learning procedure (Žerovnik & Nančovska Šerbec, 2021). The teacher functions primarily as a facilitator rather than merely as a transmitter of information. Learners therefore have greater responsibility for determining how they investigate the problem, how they collaborate and how they develop and communicate their solutions. Consequently, the emphasis is not only on the final product but also on the learning process, inquiry, collaboration, application of knowledge, reflection and development of twenty first century skills.

This distinction is particularly important because project activities can occur in conventional teaching without necessarily constituting PBL. A genuine PBL environment requires meaningful inquiry, student's agency, authentic contexts, sustained engagement, collaboration and opportunities to apply and construct

knowledge. Therefore, in the present study PBL refers to a pedagogical approach rather than simply the use of projects as classroom activities.

The relevance of PBL to the present study is grounded in the growing emphasis on learner centered, competency based, collaborative and real-world learning in Nepalese school education. Nepal's School Education Sector Plan (SESP) 2022-2032 emphasizes quality education and the development of a skilled, productive and competitive workforce with competencies such as critical thinking, creativity, cooperation and interpersonal skills. These emphasizes are highly connected with the major underpinnings of PBL and its major focus on active engagement, problem-solving, teamwork and genuine learning experiences.

In Nepal various organizations have worked to implement the PBL through various initiatives. OLE Nepal has promoted PBL practices while initiatives associated with the British Council's International School Award (ISA) have encouraged schools to engage learners in real life problem solving, international collaboration and cultural understanding. For instance, Brihaspati Vidya Sadan, in Kathmandu, is an experience that has been involved in the ISA project and has introduced the activities related to real life problem solving and sustainable school development (British Council [BC], 2018). Also, Amics Del Nepal have adapted the PBL with the national curriculum to motivate students in exploring real life experiences and problems, which provide opportunity for problem-based learning and problem solving (Amics Del Nepal, 2022).

The present study is particularly concerned with PBL practices in private schools that adopted internationally oriented curricula and pedagogical approaches. Such schools provide an important context for examining how PBL is understood and implemented in secondary classrooms. The study therefore focuses on learners' thoughts, experiences and perceptions regarding PBL practices and their contribution to meaningful, collaborative and real-world learning. The selection of the study context is also informed by my direct engagement with PBL-related training and school-based practices. My involvement in PBL training and subsequent interaction with schools implementing PBL provided an opportunity to observe how the approach is interpreted and practiced in the Nepalese educational context. In particular, the context of Brihaspati Vidya Sadan which joined the International School Award program in 2018, provides a relevant setting for examining PBL implementation and learners' experiences of this approach (BC, 2023).

Thus, PBL is relevant to the present study because it provides a framework for undersigning how secondary level teachers experience student centered inquiry, collaboration, students' autonomy, real world problem solving and the development of twenty first century skills. The study seeks to examine these dimensions of PBL practice within the selected school context and to understand how teachers perceive and experience PBL as an alternative to predominantly traditional approaches to classroom learning.

Project-Based Learning in the Nepalese Context

Education in Nepal has been undergoing changes in response to the changing social, economic, technological and educational demands of the twenty first century. The emphasis of education has increasingly extended beyond the transmission of subject specific knowledge towards the development of human resources capable of responding to emerging challenges and opportunities. Within this changing educational landscape, there has been increasing attention to approaches that can prepare learners with knowledge, skills, creativity, criticality and problem-solving abilities relevant to their future personal, academic and professional lives. The changing nature of education has also been influenced by internationalization and globalization. These processes have affected the trajectory of Nepalese education and have contributed to the development of educational practices that seek to respond to changing workforce and societal requirements (Entwistle & Ramsden, 2015). Nepalese educational institutions relevant to diverse educational and workforce environments and that can contribute to the development of human resources capable of addressing future challenges. The development of education in Nepal has also involved interaction among governmental, academic and educational institutions at different levels. The original discussion underlying this study indicates that foreign academic institutions as well as federal, provincial and local educational institutions have contributed to educational development and curriculum related initiatives. Such developments have created opportunities for educational institutions to explore alternative pedagogical practices that can respond to contemporary learning needs.

In this wider reform-focused context new means of teaching and learning have begun to show increased importance. Traditional methods that rely heavily on transmission and replication of information create fewer opportunities for students to put their learning into practice. As a result, we may need to find new ways of teaching

that can support learners to be active participants, relate their experiences to their environments and develop skills in real-world contexts.

The changing orientation of education has created greater space for student centered approaches to teaching and learning. Student centered education places students more actively at the center of the learning process and recognizes learning as process through which students construct and apply knowledge rather than simply receive information. Such an orientation encourages learners to participate in learning activities, investigate issues, collaborate with others, make decisions and connect classroom with their experiences. The movement towards student centered education is particularly relevant to the development of skills required in contemporary society. Students are increasingly expected to demonstrate critical thinking, creativity, communication, collaboration and problem-solving abilities in addition to academic knowledge. Therefore, curriculum implementation needs to provide opportunities through which students can practice these abilities in meaningful context.

In the Nepalese context the shifts towards more active and student-centered forms of instruction create opportunities for teachers to reconsider their classroom practices. Instead of relying exclusively on teacher directed instruction, teachers can design learning experiences that require students to investigate problems, exchange ideas, work collaboratively, undertake practical activities and reflect on what they have learned. Such practices can potentially make learning more relevant to students' experiences while supporting the development of diverse competencies. The student-centered orientation is also relevant to the integration of local knowledge and cultural experiences into formal education. Nepal has a rich tradition of practical knowledge and skills embedded in everyday community life. Customs of objects and ancient technologies. Dokos, Jantos, Gattas, and Dhikis, are manifestations of local knowledge and customs structures. Those experiences being incorporated into learning activities support the connection of formal knowledge of students with their local cultures. The imperative for learner centered education can be closely linked to experiential and hands on learning.

Experiential learning can allow learners to explore through experience, action, reflection and applying knowledge. Practical learning can enable learner to go beyond the mere conceptual knowledge by working practically with objects, materials, problems, and situations that are relevant to real world lives. Such learning may become meaningful when learner is engaged in a meaningful activity, which is related

to their lives in practical terms. E.g. Students may research how a traditional Nepali basket or, Doko is designed and connected. This can allow students to gain practical experiences as well as gaining cultural knowledge, designing planning, problem solving and collaboration.

Experiential learning therefore provides a useful pedagogical foundation for connecting what students learn in school with what they encounter in their communities. Rather than treating theoretical and practical knowledge as separate, these approaches can encourage students to apply concepts through purposeful activities. PBL is relevant to this orientation because it can organize learning around meaningful tasks through which students investigate, create, collaborate and apply knowledge.

The changing educational context of Nepal creates a relevant space for considering PBL as a student centered and experiential pedagogical approach. PBL provides opportunities for students to engage in meaningful tasks and challenges, different issues investigation, knowledge application, collaborative with others and develop practical outcomes. It can therefore provide a bridge between classroom-based theoretical learning and practical experiences. The relevance of PBL is also associated with the development of skills considered important for contemporary learning and future work. Through project activities students may have opportunities to develop critical thinking, creativity, collaboration, communication, decision making and problem-solving abilities. In this respect, PBL can support the development of the four commonly identified twenty-first century competencies while allowing learners to apply these skills within meaningful learning situations.

Somewhere a little further 'on' from everyday students' questions is the concept of inquiry based and Science, Technology, Engineering, Arts, and Mathematics (STEAM) education, which from the literature I have gathered, have huge potential being both an off shoot of PBL and as a tool of achievement for inquiry-based students (Koirala & Neupane, 2023). Linking to inquiry-based principles, where students look at problems from many angles and draw on previous knowledge to creatively and practically solve them, PBL could become an effective way of allowing access to knowledge and practice of local cultural knowledge. Two cultures, cultural capital and those sciences, could be merged in a whole project creating a 3-multicultural-way-of-working if students are to design a piece or produce something resembling something from that culture: students are asked to understand

history and culture behind objects, what experience and processes are involved, develop a design, work in teams and produce a practical item.

Another factor that supports the practical aspect of PBL is the notion that learners can learn by meaningful practical experiences instead of purely theoretical teachings (Granado-Alcón et al., 2020). Because of this, PBL might be a pedagogical approach to design the learning experiences in which students can use knowledge and build skills through action.

Although PBL has potential relevance to the changing educational context of Nepal, its adoption and implementation cannot be assumed to be straightforward. The introduction of an innovative pedagogical approach at policy or curricular level does not necessarily guarantee its reflective implementation in everyday classrooms. Teachers have to perceive the underpinnings of the PBL and implement them into their classroom practices suitable for their classroom environment and their students. The implementation of PBL may require teachers to move beyond conventional instructional roles. Techers may need to identify meaningful project topics, design learning tasks, facilitate inquiry, support collaboration, monitor students' progress, provide guidance and assess learning processes and outcomes. These responsibilities may require extra work from the teachers and also demand suitable content knowledge, more time for lesson preparation, extra resources and institutional assistance.

In addition, where students have different prior educational backgrounds, interests, and skills, predispositions to active learning, prior experience with participative learning in a group, or prior familiarity with a problem-solving approach, their response to PBL may also vary. Some students may find it easier to participate fully in the group work, whether through participation in practical activities or in cognitive tasks, and others may need more help. The perception of PBL as an experience will often be because of this context dependent. To gain a full understanding of PBL make sure to explore how teachers and students perceive it in practice. A further factor to consider concerns assessment practices. If the dominant tradition in education remains one of traditional assessment methods, if we have tensions around PBL tasks related to curriculum needs, exam preparation or resourced learning environments, then the reality of how PBL works with teachers in the classroom is affected.

These implementation realities make it important to distinguish between the theoretical value of PBL and its actual enactment in educational settings. A pedagogical approach may be considered innovative and beneficial in principle, but teachers' experiences can reveal the opportunities, adaptations, difficulties and contextual conditions involved in putting that approach into practice.

The above discussion indicates that the changing educational context of Nepal provides a relevant setting for examining PBL. The movement towards student centered, inquiry based, experiential and practical learning creates opportunities of PBL to contribute to students' active participation and the development of contemporary competencies. At the same time, the implementation of PBL is situated within classroom, institutional, curricular and cultural conditions (Sayed & Sarangapani, 2021). Although PBL has been discussed in relation to inquiry-based learning, STEAM education, practical learning and the development of twenty first century skills, there remains a need to understand how teachers themselves experience and interpret its implementation in everyday classrooms. It is important to explore what teachers observe regarding students' participation and how they perceive students' motivation and engagement during PBL activities.

Therefore, the need for the present study arises from the importance of examining PBL not only as a theoretically promising pedagogical approach but also as a lived classroom practice. Exploring teachers' experiences can provide contextualized insight into how PBL is implemented, how teachers interpret students' responses and what opportunities and challenges they encounter within their educational settings. Such understanding can contribute to a more context sensitive discussion of PBL and its place within student centered education in Nepal.

Statement of the Problem

Over time, the Nepalese education system has been moving towards more innovative approaches to teaching and learning. There have been connotations in urban school contexts that pedagogies used have moved away from traditionally dominated pedagogies towards student centered, inquiry based, experiential, and project-based pedagogies (Giri et al., 2025). More and more, schools have been providing more opportunities for the students in the form of fieldwork-based activities, practical activities and hands-on-based pedagogies. Amidst all these innovative pedagogies, PBL has become one that has received a lot of attention as pedagogical approach that can link classroom learning with activities and real-life

contexts. The increasing attention and attention on PBL seem to be gaining momentum as the changing aspirations of education, as it is seen as necessary to develop learners who are able to think critically, solve problems, work in teams, communicate effectively and participate effectively in learning activities. Bell (2010) also points out the relevance of PBL for 21st-century skills. The emerging popularity of this approach has also opened up debate and discussion on many issues, namely: how ready are teachers in the effective implementation of this approach?

The implementation of PBL is more complex than simply introducing project activities into classroom instruction. It requires teachers to create appropriate learning environments, facilitate inquiry, guide students in exploring issues, organize collaborative activities, provide necessary support and monitor students' learning through the project process. Teachers have a significant role in determining how students experience and participate in PBL activities. Kapur (2018) recognizes various skills needed for the implementation of innovative pedagogical methods, including conducive classroom settings and engagement of the students considering the issues and participation in the project activities. The interaction and collaboration involved in PBL can provide opportunities for students to work with peers and teachers while addressing common problems or questions (Shukla et al., 2024). In this sense the teacher is not merely an external provider of information but becomes an important facilitator of the learning process. However, if teachers are not fully prepared to work within a new pedagogical approach, the envisioned opportunities for the participation and engagement of the students may not be fully achieved (Adhikari, 2024). Thus, the implementation of PBL needs to be understood in relation to teachers' preparedness, classroom practices and their capacity to facilitate meaningful student involvement.

Although schools may adopt innovative pedagogies at the institutional level, adoption of pedagogy does not necessarily mean that teachers are equally prepared to implement it effectively. This creates an important issue for educational practice whether teachers have sufficient understanding, skills, preparation and support to translate the principles of PBL into everyday classroom practices. The concern is particularly important because PBL changes the conventional relationship between teaching and learning. Students are expected to become more active in investigating problems, interacting with peers, making decisions, contributing ideas and working towards project outcomes while teachers are expected to guide and facilitate these

processes. Shukla et al. (2024) emphasized the importance of interaction among students and teachers in PBL, suggested that active participation can support learners in working towards common solutions. Therefore, the quality of PBL implementation may depend considerably on how teachers understand their roles and how they facilitate students' involvement in the learning process. Without adequate preparation and understanding there is a possibility of a gap between the intended principles of PBL and its actual classroom enactment.

The issue becomes more significant in the Nepalese and Kathmandu Metropolitan context. Ministry of Education, Science and Technology (MoEST) has made efforts towards promoting innovative and learner centered approaches, including PBL. However, the available evidence identified in the present study does not sufficiently explain how teachers have embraced PBL and how they have integrated it into their classroom practices, particularly within Kathmandu Metropolitan Schools. The concern, therefore, is not simply whether PBL has been introduced or promoted but how it is experienced and implemented by teachers within their specific educational settings. The Kathmandu context provides an important setting for examining this issue because schools that have adopted PBL may differ in terms of teacher's preparedness, classroom conditions, available resources and support systems. Consequently, there is a need to move beyond policy level or general claims about PBL and examine teachers' actual experiences of implementing the PBL pedagogy.

The limited contextual understanding of PBL implementation creates an important research problem concerning students' participation, motivation and engagement. Rogers et al. (2013) indicate that teachers' use of pedagogical approaches can influence students' motivation and degree of engagement. In PBL students' active involvement is an important part of the learning process because project activities require learners to participate, interact, collaborate, investigate and work towards meaningful outcomes. The presence of project activities alone does not establish how students participate or how teachers perceive their motivation and engagement during the teaching process. Therefore, a need to understand these experiences from the perspective of teachers who have implemented PBL in their classrooms.

The central problem addressed by this study is thus the limited contextual understanding of hoe teachers experience and interpret the implementation of PBL in

Kathmandu Metropolitan schools particularly in relation to students' participation, motivation and engagement. While PBL is increasingly recognized as a promising learner centered pedagogy there is insufficient understanding of how teachers negotiate its implementation in their everyday classroom realities and how they perceive students' responses to the PBL approach. Without such contextual understanding it becomes difficult to identify the opportunities, challenges, support needs and pedagogical conditions associated with PBL implementation. Therefore, as in-depth exploration of teachers lived experiences is necessary to understand how PBL is enacted in practice and how teachers interpret students' participation, motivation and engagement within PBL activities. This need provides the basis for the present study.

Purpose of the Study

The purpose of this qualitative hermeneutic phenomenological study is to explore the teacher's lived experience of implementing PBL in secondary level classrooms in Kathmandu Metropolitan schools and basically the study focuses on teachers' experiences of students' participation during PBL activities and their perceptions of the influence of PBL on students' motivation and engagement.

Study Guideline

The study addresses the following guidelines:

1. How are teachers using PBL as a tool to encourage students' motivation?

The following sub-questions were included:

2. How do teachers apply PBL instruction in the classroom?
3. How do teachers' use of PBL encourage students' participation and learning?

Rationale and Significance of the Study

Project-Based Learning (PBL) has been recognized as a student centered and inquiry-based approach that connects classroom learning with authentic and meaningful activities. It provides opportunities for learners to engage in projects, collaborate with peers, apply academic knowledge to real world problems, learn from mistakes and develop skills such as critical thinking, collaboration, creativity and communication (Allison, 2018; Almulla, 2020). PBL can also support knowledge retention, intrinsic motivation, self-directed learning, practical experience and deeper understanding of content (Hattie, 2017; Larmer et al., 2015; Norman & Schmidt, 1992). In this context the present study is significant because it seeks to understand

teachers' experiences of implementing PBL and their perceptions of students' participation, motivation and engagement in Kathmandu Metropolitan schools.

Based on theoretical significance, the study contributes to the understanding of PBL as a learner centered and experiential pedagogical approach. PBL connects academic knowledge with authentic experiences and provides opportunities for learners to construct and refine their understanding through action, collaboration, problem solving and reflection. The study may therefore contribute to the theoretical understanding of how experiential and constructivist principles are reflected in classroom based PBL practices. It also provides contextual insight into the relationship between PBL and students participation, motivation and engagement from thatcher's perspectives. Similarly pedagogical significance may provide practical insights for teachers who are implementing or planning to implement PBL in their classrooms. PBL requires teachers to facilitate inquiry, organize collaborative learning, connect disciplinary content with authentic situations, support students' problem solving and monitor their learning throughout project activities. Understanding teachers' experiences may therefore help identify effective practices as well as challenges associated with classroom implementation. The findings may also inform teachers of professional learning and their efforts to integrate PBL into regular lesson planning and classroom instruction.

At the institutional level the study may help schools and educational institutions understand the conditions required for meaningful implementation of PBL. The findings may draw attention to teachers' professional preparation, instructional support, learning resources, collaboration and assessment practices that can influence the implementation of PBL pedagogy. Such contextual understanding may assist educational institutions in developing appropriate support mechanisms for teachers and in strengthening innovative teaching and learning practices. The study may also provide insights for connecting classroom learning with students' communities, cultural experiences and real-world contexts. Similarly at the policy level, the study may contribute contextual evidence to ongoing discussions about learner-centered, innovative and experiential approaches to education in Nepal. As education systems respond to globalization, educational reform and changing demands for knowledge and skills, understanding how pedagogical reform are experienced are classroom level is important (Zajda, 2021). The findings may therefore be useful to education policymakers, curriculum developers, school leaders,

teachers and other stakeholders when considering professional development, institutional support and the practical implementation of PBL. However, the study does not seek to generalize its findings to all educational institutions in Nepal rather it provides an in-depth understanding of PBL implementations within the selected Kathmandu Metropolitan school contexts.

Definition and Clarification of Key Terms

In this study, PBL refers to a student-centered learning approach in which students learn by engaging in meaningful, real-world projects through inquiry, collaboration, problem solving and creation of a final product and outcome. Similarly, in this study student participation refers to students' active involvement in classroom learning acuities, discussions, group work, project tasks, decision-making and other learning processes. Likewise, in this study experiential learning refers to learning through direct experience, active involvement, reflection and application of knowledge in meaningful and real-world situations.

In this study, student motivation and student engagement are treated as related but distant concepts. Student motivation refers primarily to the willingness, interest, intention or reasons that encourage students to participate in learning. Student engagement refers to the ways in which students become actively involved in learning activities, including behavioral, cognitive, emotional and social involvement. The distinction and enthusiasm without being able to directly determine all the underlining motivational processes. The study therefore examines teachers' perceptions of their related dimensions rather than treating motivation and engagement as interchangeable concepts.

Delimitations of the Study

The present study was delimited to selected secondary level schools within Kathmandu Metropolitan City. The study focused on the experiences of sic participating teachers who had experience of implementing PBL in their respective school contexts. The selection of a limited number of participants was consistent with the qualitative hermeneutic phenomenological orientation of the study which sought an in-depth understanding of participants lived experiences rather than statistical representation.

In terms of the phenomenon under investigation, the study was delimited to teachers lived experiences of implementing PBL in their classroom and school contexts. Attention was given to how teachers experienced and interpreted the

implementation and management of PBL and how they perceived students' participation, motivation and engagement during PBL activities. The study therefore did not attempt to examine all possible outcomes or dimensions of PBL implementation. Methodologically, the study was confined to a qualitative hermeneutic phenomenological approach. The phenomenon was explored and interpreted primarily through the perspectives of the participating teachers. The study did not employ quantitative measures to statistically determine the effectiveness of PBL or to establish causal relationship between PBL and students' learning outcomes. Similarly, theoretically, although the phenomenon could be examined through multiple theoretical perspectives, the study was deliberately delimited to Experiential Learning Theory (ELT) as its primary theoretical orientation. This delimitation enabled the study to interpret teachers' experiences of PBL in relation to learning through experience, practical engagement, reflection and application of knowledge.

Finally, the findings of the study were delimited to the experiences and interpretations of six participating teachers within the selected Kathmandu Metropolitan school contexts. The findings were therefore context specific and were not intended for statistical generalization to all teachers, schools or educational institutions in Nepal. Rather, the study sought to provide contextually grounded in-depth understanding of teachers' experiences of implementing PBL.

Chapter Synopsis

This chapter introduced the study on teachers lived experiences of implementation PBL in selected Kathmandu Metropolitan schools. It presented the background and educational context of PBL as a student centered and experiential approach that connects classroom learning with authentic problems, collaboration, inquiry and real-life situations. The chapter also discussed the development and relevance of PBL in Nepalese educational context, including the growing emphasis on active, creativity, problem solving and learning participation. The problem statement identified the need to understand teachers' experiences of implementing PBL particularly in relation to students' participation, motivation fand engagement. The chapter presented the purpose of the study and the research questions that guided the inquiry. The rationale explains the significance of exploring teachers lived experiences within the selected school contexts. Lastly, the chapter presented the delimitations of the study and clarifies the key concepts used throughout the study.

CHAPTER II
LITERATURE REVIEW

Chapter Overview

This chapter reviews the conceptual, theorical, policy and empirical literature related to PBL and its implementation in school education. It conceptualizes PBL as a learner centered, inquiry-based approach characterized by authentic inquiry, collaboration, autonomy, problem solving, reflection and meaningful application of knowledge. The chapter also distinguished PBL from related pedagogical approaches to establish conceptual clarity. It traces the historical development of PBL and examines its relationship with student motivation, participation and engagement. Attention is given to the learning environment and teachers' role in designing, facilitating and scaffolding PBL. Experiential Learning Theory is discussed as the theoretical framework, drawing particularly on Dewey's experience-centered philosophy and Kolb's experiential learning cycle. The chapter further examines Nepal's policies and educational initiatives related to PBL, experiential and learner centered education. National and international empirical studies are critically reviewed to understand PBL implementation, student experiences and teachers' roles. Finally, the literature is synthesized to identify contextual, experiential and pedagogical gaps that justify the present study of teachers lived experiences of implementing PBL in selected Kathmandu Metropolitan schools.

Conceptualizing PBL as a Student-Centered Pedagogical Approach

PBL has progressively been conceptualized as a student-centered pedagogical approach in which students develop knowledge and skills through active engagement with meaningful questions, problems and projects. Unlike conventional teacher dominated instruction, PBL shifts considerable responsibility for learning towards students while maintaining an important facilitating role for teachers. Students are expected to investigate, collaborate, make decisions, solve problems and apply knowledge in situations that extend beyond the reproduction of textbook information (Nepal & Jenkins, 2011).

Existing literature suggests that student centeredness in PBL is closely associated with self-directed and self-regulated learning. English and Kitsantas (2013), for example, connect PBL with students' capacity to regulate their learning,

assume responsibility and remain engaged in expended learning activities. In a similar manner, Yuliansyah and Ayu (2021) identify opportunities for learners to develop, organize, and undertake more extended projects that result in either products or presentations. These kinds of experiences offer opportunities for learners to integrate academic learning and the practice of social context. Same here, PBL involved pedagogical changes with teachers, learners, and knowledge. Instead of acting as providers of information, teachers create learning experiences, help inquiries, promote cooperation and enable children's learning process. Almulla (2020) considers PBL teaching approaches as promoting participation, interaction, and the relationship between theory and practice.

However, student centeredness should not be understood as the absence of teacher guidance. Students may require structured support to formulate questions, organize tasks, collaborate effectively and reflect on their learning. Therefore, PBL is better understood as a reconfiguration of teacher and student roles rather than as a simple replacement of teacher directed instruction (Anazifa & Djukri, 2017). This understanding is especially relevant to the present study because it investigates how teachers themselves experience and enact this changing pedagogical role.

Defining Characteristics and Core Elements of PBL

PBL has been defined in different ways across educational literature although most definitions share several core characteristics. Bell (2010) describes PBL as an approach where students take the lead in their learning, while teachers provide guidance and facilitation. From this perspective PBL emphasizes students' autonomy, technological skills, communication proficiency, advanced problem-solving, and development of knowledge through purposeful activity. Abrahams and Reiss (2012) similarly emphasize the importance of hands-on and minds-on experiences to enhance learners' conceptual understanding about real-world experience.

Gary (2015) explains that in collaborative approach students are involved in socio emotional development and apply their learning to explore, evaluate, and solve problems. A central feature of PBL is the engagement of students with autistic or meaningful questions and problems. Projects are not intended merely as additional classroom exercises after teaching have been completed; rather, they can function as vehicles through which students investigate important disciplinary ideas and apply knowledge in real world or realistic contexts (Park & Hiver, 2017). Maida (2011) emphasizes extended engagement with challenging and authentic questions while Lee

et al. (2016), highlight student-directed and multidisciplinary learning experiences highly valued in PBL. Collaboration is another defining feature of many PBL environments. Students commonly work with peers to investigate problems, negotiate ideas, distribute responsibilities and produce shared outcomes. Such processes can support communication, interpersonal learning and the development of collective responsibility. At the same time PBL may provide opportunities for individual decision making, student voice and ownership over aspects of learning process.

Authenticity also distinguishes high-quality PBL from routine classroom assignments (Dewey, 1916). Meaningful projects are connected to real problems, social issues, local contexts, disciplinary practices or audiences beyond the immediate classroom. Larmer and Mergendoller (2010) emphasize that students need to perceive projects as meaningful while the activities must also be carefully designed to accomplish intended learning goals. Reflection is equally important because activity alone doesn't necessarily produce deep learning. Students need opportunities to consider what they have done, what they have learned, what difficulties they have encountered and how their understanding has developed. For this reason, PBL can be understood as involving a combination of authentic inquiry, sustained investigation, collaboration, student autonomy, reflection, teacher facilitation and the creation or presentation of meaningful outcomes.

PBL is understood as a student centered and inquiry oriented pedagogical approach in which students engage in sustained and meaningful projects to investigate questions or problems, collaborate with others, apply disciplinary knowledge and construct understanding through active and experiential learning. Within this process, teachers function as designers, facilitators and scaffolds who support learners' participation, reflection and progressive independence. The present study focuses on how teachers experience the implementation for these features and how they perceive students' motivation, participation and engagement during PBL activities (Miettinen, 2000; Ozdem-Yilmaz & Bilican, 2025).

Distinguishing PBL from Related Approaches

PBL shares several characteristics with problem-based learning, experiential learning and activity-based learning. These approaches commonly emphasize active participation, inquiry, problem solving and movement away from passive reception of information. Nonetheless they should not be treated as synonymous.

PBL involves sustained inquiry organized around a meaningful project and frequently concludes in the development of a project, performance, solution, presentation or other demonstrable outcome (Al-Shawabkeh et al., 2026). Problem based learning in contrast, generally uses a complex problem as the primary stimulus for investigation and knowledge construction. Although a project may involve several problems and a problem-based learning activity may involve project like work, the organizing principle of the two approaches differs. Experiential learning is broader than PBL and refers to the development and transformation of knowledge through experience and reflection. PBL can provide a pedagogical environment in which experiential learning occurs, but not all experiential learning necessarily takes the form of a project (Krauss & Boss, 2013). Similarly, activity-based learning (ABL) involves learners in purposeful activities but may not necessarily include the sustained inquiry, student autonomy, authenticity and extended process normally associated with PBL.

This distinction is particularly important in the present study because the abbreviation PBL is consistently used to refer to project-based learning rather than problem-based learning. Establishing this conceptual boundary helps ensure consistency in the interpretation of teachers' experiences throughout the study.

Historical Development of PBL

The intellectual foundations of PBL can be sketched to progressive educational traditions that challenged teacher center instruction and the view of learners as passive recipients of knowledge. Early project-oriented ideas emphasized purposeful activity, practical experience and the connection between schooling and learners' everyday lives. These ideas become particularly influential through the progressive education movement associated with John Dewey and later William Heard Kilpatrick.

Bilgin et al. (2015) claim that the PBL origins date back to the early 20th century. Over time projects become associated with collaborative learning, interdisciplinary inquiry, problem solving and the active construction of knowledge. Later it conceptualized and further emphasized student autonomy, sustained inquiry, authentic tasks, collaboration, reflection and the creation or presentation of meaningful outcomes. Kilpatrick, (1918), the father of problem-based learning, employed the PBL paradigm and stated that the project's goal was to help students gain experience by assisting them in developing a certain level of ability or

knowledge necessary to perform inquiry activities. According to (Knoll,1997), Kilpatrick's formulation and distinguished the project method from contemporary PBL was important in advancing the idea that meaningful learning can occur through purposeful activity rather than through instruction alone.

Kilpatrick reinterpreted the project as an entirely intentional activity that revolves around the concept of a student-determined project rather than a more autonomous and constructive exercise. According to (Pecore, 2015), Dewey, his spouse, and numerous other educators established the PBL methodology from 1896–1903 at his University of Chicago laboratory school. This technique posed a challenge to the prevalent belief that knowledge was a fixed concept awaiting discovery.

Talking about John Dewey he was the one pioneered American education innovators of the 20th century. According to Westbrook (1993), John Dewey's educational thought and writings advocated about the American democracy and the idea directly impact the social, political and intellectual property. Again, Westbrook highlights that John Dewey advocated learning through activities relevance to democratic principles and practices that are relevant to students' everyday living creativity. According to Dewey (1938), Kilpatrick and his allies misunderstood the purpose of project-based learning (PBL) when they failed to recognize that teachers' leadership, which fosters students' capacity for thought and creation, was what allowed students to think, not merely their freedom to choose how they wanted to go. Modern PBL interpretations incorporate structured inquiry, teacher scaffolding, formative assessment, collaboration, digital technologies, student voice, agency and autonomy, reflection and public presentation of learning outcomes and provide more structured pedagogical framework for organizing learning around authentic questions, problems and projects.

Therefore, the historical development of PBL demonstrates a gradual shift from transmission-oriented education toward experiential, inquiry based and student-centered approaches. The contributions of Dewey and Kilpatrick provided important philosophical and pedagogical foundations. This historical perspective provides a basis for understanding PBL in the present study as a student centered and experiential approach in which teachers facilitate meaningful experiences, inquiry, collaboration, reflection and application of knowledge within specific school contexts.

PBL, Student Motivation, Participation and Engagement

According to oxford dictionary, motivation refers to intrinsic or extrinsic driving force that influences of human behaviors. In the context of education, students' motivation is a complex matter influenced by individual, social, pedagogical and environmental kinds of various factors. In the learning process, motivation determines students' willingness to initiate, sustain and invest effort in learning activities. Teachers can enhance students' motivation by integrating engaging learning experience, generating student autonomy and choice and fostering collegial learning atmosphere (Fong & Fathi, 2023; Millacci & Lancia, 2022). The research-study showed that motivation is not simply a student's desire to learn but it involves the internal and external conditions that stimulate students to participate actively and persist in learning.

PBL provides several conditions that can support students' motivation. In PBL, students are provided with opportunities to choose the exercises, take ownership or learning tasks, collaborate with classmates, investigate meaningful problems and connect classroom learning with real-world contexts. Larmer et al. (2015) mentioned the importance of students' choice and voice in PBL, suggesting that opportunities to make decisions about their learning can strengthen sense of ownership and motivation. When students work collaboratively to investigate problems and complete tasks they can stimulate their learning. Hannam University and Shin (2018) reported that collaborative problem solving and self-directed learning processes in project work can contribute to students' motivation and the development for collaborative skills. Rigorous activities about creating, implementing and assessing as a framework of PBL motivate students to collaborate and continue to achieve more. Students take an active role in different learning platforms through PBL which enhances learning progress and students' motivation. By involving themselves in PBL, students start valuing their learning, exploring hands on experience are more likely motivated to engage in interpersonal projects (Jimenez, 2023).

The present study doesn't attempt to measure students' motivation through standardized psychological instruments. Somewhat it explores how teachers lived experiences and their perceptions of how students respond during PBL activities. So, references to student motivation are this study mostly concern teachers' interpretations of students' interest, willingness, persistence, ownership, participation and engagement during PBL.

PBL Learning Environment

PBL establishes a dynamic learning environment that fundamentally departs from orthodox, lecture-based instruction by structuring education around interconnected tasks where students seek and present solutions. This immersive approach transforms the classroom into a makerspace (McKay et al., 2016), centered on rigorous, continuous processes to develop experienced frameworks for assessing project outputs based on specific criteria (Larmer & Mergendoller, 2010). Unlike traditional settings focused on individual information reproduction but PBL emphasizes critical thinking, collaboration, communication, creativity and real-world problem solving. PBL requires a productive environment bridging physical, pedagogical and social dimensions which encompass all access to materials, scaffolded tasks and collaborative classroom culture that extends to field work, laboratories and digital spaces. Within this PBL environment teachers play a critical role by providing regular opportunities for students to evaluate their own learning.

Nurturing cooptative learning the PBL integration significantly increases students' enthusiasm, creativity and problem-solving abilities, allowing them to utilize available resources to continue studying outside the classroom Habók and Nagy (2016). Students actively advance their talents because they collaborate, build on one another's ideas and share their work. According to Dimmitt (2017), PBL entails having students go deeply into investigations to solve difficult real-world problems that require student-designed and prepared materials to acquire knowledge and skills.

Here integrating technology assisted PBL experiences into this digital era further transforms practical work environments compared to conventional instruction Hernández-Ramos and De La Paz (2009). Technology integration creates crucial space for personalized learning and flipped classrooms, making PBL highly important for modern educational transformation. Researchers emphasize that developing critical thinking, problem solving, competence and engagement skills is very crucial in PBL settings (English & Kitsantas, 2013; Kwietniewski, 2017). While digital tools vastly extend students' opportunities to investigate, communicate, design and present their learning, technology itself doesn't make an activity project based. Finally, as supported by Habók and Nagy (2016), the educational value of these modern tools depends entirely on how effectively they support active inquiry, collaboration and meaningful knowledge creation.

Experiential Learning Theory as Theoretical Framework

Dewey and Experience Centered Education

John Dewey's philosophy of education provides a foundational framework for understanding the experiential nature of PBL. Dewey (1916, 1934) highlighted that real education is interrelated to the real-life experiences and states that successful and meaningful learning happens when the students are engaged in situations that demand investigation, explanation and purposeful actions. This approaches basically challenges traditional, passive model of schooling in which students most of the case act as a passive recipient of teacher transmitted information (Dewey, 1916; Nickerson, 2023). In an experience centered learning platform students adopt an active learning attitude, acquiring knowledge through 'learning by doing' approach that centers student agency (Nickerson, 2023; Roberts, 2003).

Similarly, Dewey maintained that not every experience is automatically educational, the educational value of an experience depends directly on how it is organized, structured and reflected upon (Dewey, 1934). Therefore, teachers' role is vital in setting up appropriate conditions and aligning curricular content with students' readiness, interests and capabilities (Roberts, 2003). The quality of the designed experience dictates the depth of learning, critical thinking and the ultimate application of knowledge across varied context specific situations. Dewey's educational philosophy aligns closely with constructivist and social learning perspectives. Knowledge is not an isolated acquisition but is socially constructed through students' ongoing experiences and interactions with their environment and community (Pappas, 2023; Staff, 2024). Every individual learns and grows because of their day-to-day interactions within society, which serves as the core idea of Dewey's social learning framework.

This theoretical orientation has direct relevance to PBL. Within a PBL classroom students participate in planned, process driven and activities-based inquiry to solve authentic real-world problems and construct actionable knowledge (Danković et al., 2022). Authentic Projects create great opportunities for students to innovate, investigate real life situations, collaborate within a social learning environment, make autonomous decisions and connect theoretical curricular contents with practical real-world applications. Dewey's viewpoint thus provides an essential conceptual bridge linking experience, inquiry, collaboration and PBL.

Kolb's Experiential Learning Theory

Kolb's experiential learning theory (ELT) provides a clear operational framework for understanding how learning occurs through the continuous transformation of experience (Kolb, 1984). Stepping upon the foundational ideas of Dewey, Kolb (1984) emphasize that knowledge is created through active experimentation and reflection, The framework models experiential learning as a dynamic cycle including four interrelated models, which are:

- Concrete Experience: Students actively participate in a meaningful situation, task, real world problem, placing direct engagement at the core of learning process (Kolb, 1984; Nickerson, 2023).
- Reflective Observation: Students step back from action to critically observe, analyze and interpret what occurred during the experience, considering different perspectives and outcomes (Kolb, 1984)
- Abstract Conceptualization: Students synthesize their observations into logical concepts, working on theories, generalized principles, bridging concrete activities with theoretical understanding (Kolb, 1984; Roberts, 2003)
- Active Experimentation: Students apply their newly formed concepts, strategies, solutions to new problems, testing their ideas through continuous action (Kolb, 1984).

According to Kolb, (1984) the process of learning highlights from these four modules are significantly more than physical participation in an activity, it requires thoughtful cognitive processing, conceptual refinement and practical reapplication.

In PBL, these experiential modes contribute to actively converted experiences along the complex and dynamic routes during the project implementation. While students exhibit and adapt the existing projects, they are involved in interactive cycles like paddling encountering project problems, experiencing operation problems, revising their conceptual approaches, experimenting other solutions and tuning the ultimate products (Danković et al., 2022; Kolb, 1984). Kolb is a key analytical system for identifying how PBL transforms active projects into profound and meaningful Knowledge.

Relevance of Experiential Learning Theory (ELT) to PBL

PBL and ELT share an emphasis on active engagement with meaningful state. PBL provides opportunities for learners to participate in projects, encounter problems, collaborate, test ideas and produce outcomes whereas ELT helps explain how learning may emerge from such experiences through reflection and conceptual development. The relationship is particularly important because project activity alone doesn't guarantee meaningful learning. Students may be physically active without critically examining what they are doing or why. Reflection, feedback, teacher questioning and opportunities to revise ideas are more important in transforming activity into learning.

Therefore, ELT supports an interpretation of PBL as a process involving action, reflection, conceptual understanding and further application rather than just 'learning by doing.'

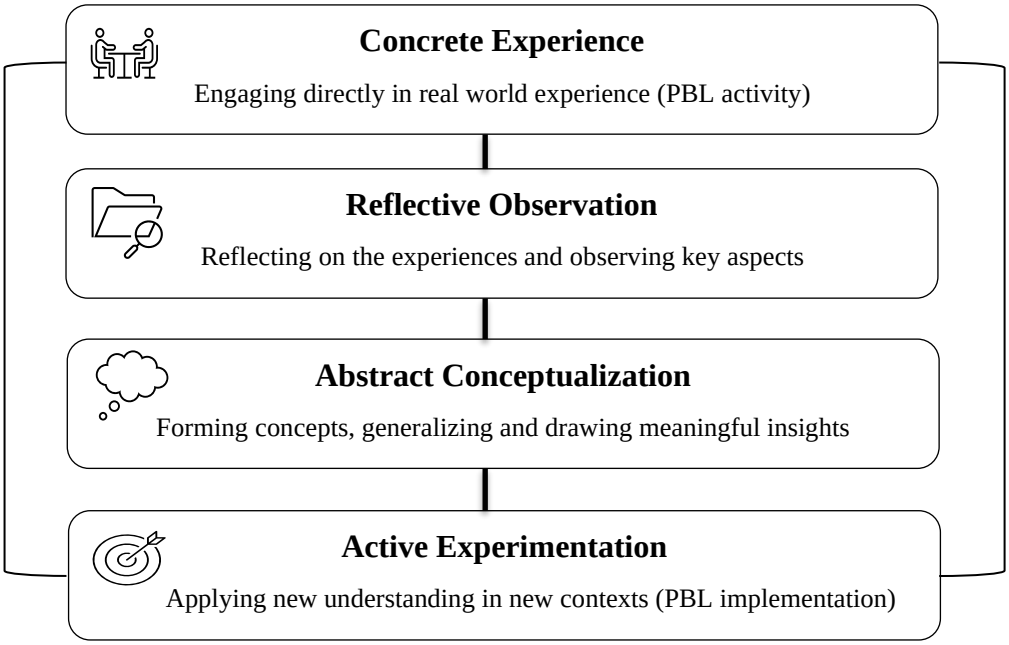
Application of the Theory in the Present Study

In the present study, ELT serves as an interpretive lens for understanding teachers lived experiences of implementing PBL. The theory helps illuminate how teachers understand the role of authentic activities, classroom experiences, reflection, collaboration and the application of knowledge within PBL environments. The ELT framework is also relevant to the teachers' own professional experiences. Through designing projects, observing students, responding to classroom challenges and reflecting on project outcomes, teachers themselves may develop and revise their understandings of PBL practice. Therefore, experiential learning can be considered at both student and teacher levels within the present study.

More importantly ELT is not used in this study as a predetermined framework for measuring whether teachers follow a fixed sequence of stages. Rather it provides a sensitizing theoretical lens through which experiences of action, reflection, meaning making and application can be interpreted while remaining open to the meanings emerging from participants' accounts.

Figure 1

Experiential Learning as an Interpretive Lens for PBL



(Kolb, 1984)

PBL in the Nepalese Educational Policy Context

Nepal educational reform agenda has increasingly emphasized student centered, competency based, experiential and practical approaches to leaching and learning. Recent policy and curriculum reform have sought to move school education beyond traditional practices dominated by rote memorization, creativity and other twenty first century competencies. These directions create a supportive policy environment for pedagogical approaches such as PBL which emphasizes student participation, ownership, authentic learning experiences, inquiry, collaboration and the application of knowledge to real world problems. In this context PBL can be understood not simply as a classroom management but as a pedagogical approach that vibrates with the broader direction of educational reform in Nepal. To understand the position of PBL within the Nepalese education system it is useful to distinguish between national policy and curriculum frameworks that provide policy space for such approaches and educational programs and initiatives through which these orientations are translated into practice.

National Policy and Curriculum Framework

At the national level, Nepal's major education policies and curriculum frameworks provide an increasingly supportive foundation for student centered practical, experiential and competency-based pedagogies.

National Education Policy

The National Education Policy, 2019 provides the main policy direction for transforming Nepal's education system in response to changing social, economic, technological and educational needs. It emphasizes student friendly, practical, skill oriented and innovative approaches to education and seeks to move teaching and learning beyond conventional practices. Such policy orientations provide an important basis for pedagogical approaches that encourage students to learn through experience, inquiry, problem-solving and active participation. Although the policy doesn't necessarily prescribe PBL as a single mandatory instructional method, its emphasis on practical and student-centered education creates policy space for project-oriented approaches.

National Curriculum Framework 2019

The NCF developed by the Curriculum Development Center (CDC) provides an important curricular basis for implementing the student centered and competency-oriented direction of national education policy. The framework emphasizes the development of students' knowledge, skills, competencies, creativity and entrepreneurial capacities and supports integrated approaches to learning. Koirala and Neupane (2023) pointed out the trend for integrated and STEAM focused orientation in the school curriculum of Nepal. Subsequently, Acharya (2023) also explained the orientation of curriculum toward the integration of physical social cultural, technological, and real-life contexts with the learning contexts of students. These orientations fit well with PBL. It is because the project work in PBL allows students to integrate learning across disciplines, explore real-life issues, collaborate, and apply classroom knowledge.

School Education Sector Plan

The School Education Sector Plan (SESP) 2022-2032 is a ten-year strategic plan envisioned to improve the quality, relevance, and inclusiveness of school education in Nepal. It reflects access, participation, and learning with a focus on relevant learning experiences. The desired learning outcomes, development of competencies and meaningful learning experiences predicted in the SESP are aligned with the principles underpinning the practices of experiential learning and PBL. These policy directions are linked with other international commitments made by Nepal, including SDG 4 on inclusive and equitable quality education and lifelong learning.

On broader terms, SESP brings a strategic background for experimenting innovative approaches like PBL.

Inclusive Education Policy

The implementation of inclusive education in Nepal also offers an important background to student centered pedagogical practice (Ahmed & Islam, 2020). Inclusive education encourages responding to the variability of student learning needs and to provide opportunities for meaningful involvement of learners in classroom activities. Though, a pedagogical approach, which allows for adaptation and flexibility, for example through collaborative project work, can be an opportunity for learners with different abilities, interests learning styles, and cultural backgrounds to participate in the collective learning activity. So, the principles of inclusive education can support the student centered and participatory focus of PBL, mostly when teachers modify project activities as learners' needs and context.

Educational Programs and Implementation Initiatives

While national policies and curriculum frameworks establish broad directions, the implementation of student centered and PBL also depends on programs and initiatives operating within schools and communities. Various educational organizations and development initiatives have contributed to introducing experiential, collaborative, practical and PBL practices in Nepalese schools.

British Council also focused educational program that encourages collaborative learning, international education, hands-on learning experience and relevant skills for schooling today where the program can lead, the broader policy directions being moved into classroom and school level activities through programs and professional support (BC, 2018, 2023). Equally, Amics Del Nepal (2022) has carried out an educational program, which promote experiential, collaborative, and innovatory approaches to teaching and learning in the schools' context from local school.

PBL oriented educational programs can also contribute to bridge the gap between theoretical knowledge and practical application. Collaborative projects provide students with opportunities to work together, share responsibilities, use their respective strengths and produce outcomes through collective effort (Sudjimat & Permadi, 2019). Such learning experiences can resemble authentic social or workplace situations in which individuals need to communicate, collaborate, solve problems and apply knowledge to accomplish shared goals (Obando-Arias, 2021). In

addition, PBL approaches can enable teachers and students to connect theoretical concepts with real world applications, in that way making learning more meaningful and practical (Yu & Zhao, 2015).

Policy-Practice Interface of PBL in Nepal

The presence of supportive policy orientations, however, doesn't necessarily mean that PBL is uniformly implemented across Nepalese schools. There may be a significant difference between policy intention and classroom presentation. Policies and curriculum frameworks provide direction and opportunities for student centered, experiential, practical and competency-based education but their actual implementation depends on teachers' understanding, preparedness, pedagogical beliefs, available resources, school leadership, curriculum demands, assessment practices, time and local contextual conditions.

Therefore, the implementation of PBL needs to be understood not only in terms of what national policies prescribe but also in terms of how teachers interpret, adapt, negotiate and enact PBL practices within their school contexts (Pradhan & Karki, 2019). This difference is especially important for the present study because the study focuses on teachers lived experiences if implementing PBL in selected secondary schools of Kathmandu Metropolitan City. Examining the policy context alongside teachers' experiences helps lighten how bigger educational objectives concerning student centered practical, experiential and participatory learning are interpreted and translated into everyday classroom practices. In this sense, the Nepalese policy context provides a broader structural setting, while teachers lived experiences provide insight into the actual possibilities, challenges, adaptations and meanings associated with PBL implementation at the school level (Koirala & Neupane, 2023).

Empirical Review of Project Based Learning

The research has examined PBL across different educational levels, subjects and national contexts. Again, the studies indicate that the outcomes of PBL are shaped not only by the instructional approach itself but also by the contextual variables such as the subject area, duration of project work, student characteristics and educational environment.

Zhang and Ma (2023) indicate that the effort of PBL vary across geographical contexts, educational and course content, academic level, student characteristics and the duration of the intervention. contexts, suggesting that PBL can't be assumed to

operate identically in all settings. Their findings further indicate that the effectiveness of PBL can't be understood independently of the educational, cultural and institutional context in which it is implemented regularly. So, rather assuming PBL outcomes, it is important to examine how teachers adapt PBL within their classroom environments.

European and Westen contexts also shows the importance of school support and teacher preparedness in PBL implementation. In Denmark, project oriented and inquiry-based learning have been incorporated into educational practice, teachers' adoption of PBL has been associated with methodological and encouragement as well as support system within school (Weatherby, 2007). This suggests that PBL implementation depends on the environment creative by the teachers for student centered pedagogical practices. Research in collaborative and personalized learning environments has also suggested that PBL approaches can create opportunities for students to interact with peers and engage in meaningful inquiry. Studies such as Surr et al. (2018) highlight the value of collaborative learning structures, whereas Xu and Liu (2010) associate PBL with students' autonomy, creativity and self-directed learning.

Research associated with PBL in Asian educational setting reported that it connects between academic achievement and higher order thinking (Luchang & Nasri, 2023). Such findings are particularly relevant to contemporary educational reforms that seek to move learners beyond memorization towards inquiry critical thinking, problem solving, creativity and application of knowledge. The relationship between PBL, inquiry and problem-solving give attention in Asian research, Wahono et al. (2020) emphasized that importance of the teachers' role in facilitating PBL and inquiry-based learning. The study indicates that PBL is not simply a student-centered activity in which the teachers play a crucial role in designing learning experiences, facilitation inquiry, providing appropriate support and connecting projects with meaningful disciplinary and real-world contexts.

The conceptual roots of PBL can be traced back to the progressive educational ideologies of Swiss educator Johann Heinric Pestalozzi, (1746-1827 AD) and German educator Friedrich Frobel (1782-1852 AD), both of whom advocated for immerging students in novel, unfamiliar learning tasks to stimulate intellectual growth. This educational paradigm shifted rapidly with the foundational work of John Dewey (1859-1952), who formulated the theory of active learning, emphasizing experiential

learning for optimizing cognitive retention and practical application. Likewise, in 1918 AD, William Heard Kilpatricks, a prominent student of Dewey, formalized their concepts by developing a systematic module for the ‘project method’ placing the groundwork for contemporary PBL frameworks (Kilpatrick, 1926). In the modern era, the remarkable outcomes of these active learning principles are globally visible, which prioritize student centered, experiential learning environments.

The studies indicate several consistent benefits of PBL including student autonomy, motivation, collaboration, creativity, inquiry, self-direction, higher order thinking and engagement with authentic learning contexts. The literature mentioned that these outcomes are influenced by contextual conditions such as teacher preparedness, school support, curriculum demands, available resources, student characteristics and the duration and nature of project implementation (Wahono et al., 2020). The literature suggests that PBL should be viewed as a pedagogical approach whose meaning and effectiveness emerge through the interaction among teachers, students, curriculum, school environment and contextual realities. The studies conducted in Asian educational contexts provide further evidence of the relationship between PBL, student autonomy, creativity and higher order thinking.s The research in China and other Asian contexts has associated PBL with increased opportunities for students to make decisions, participate actively and develop creative approaches to learning (Xu & Liu, 2010).

Research and initiatives in Nepal also indicate a growing interest in PBL, experiential and student-centered approaches. The British Council’s International School Award (IAS) program launched in Nepal in 2018, encouraged participating schools to adopt innovative teaching approaches and PBL activities as part of whole school development (BC, 2018). Similarly, Amics Del Nepal has promoted PBL in Kathmandu with an emphasis on creativity, deeper learning and engagement with real world issues (Amics Del Nepal, 2022). These initiatives indicate that PBL is gradually gaining space within Nepalese educational practices (Khaniya, 2007).

Kathmandu University School of Education (KUSOED) has also contributed to the development and promotion of projects and activities-based learning in Nepal. Its initiatives have included efforts to help secondary level teachers understand and apply PBL approaches, develop teachers’ and students’ confidence in PBL and promote students’ reflective thinking and meaningful engagement (Kathmandu University School of Education [KUSOED), n. d.). Such activities are relevant to the

present study because they demonstrate the growing institutional interest in PBL within Nepal's secondary education context. Moreover, Nepal based research has begun to provide empirical evidence of the potential of PBL. For example, recent collaborative action research on integrated projects in Nepal reported that PBL enhanced students' creativity, active engagement in knowledge construction, collaboration and critical thinking skills (Pandey et al., 2025). Likewise, USAID supported education programs have contributed to the broader development of student-centered school capacity in Nepal. The Early Grade Reading Program (EGRP) and EGRP II were implemented in collaboration with the Government of Nepal to strengthen early grade reading and to support improvements in curriculum, teaching practices, teacher capacity and assessment. EGRP II, implemented from 2020 to 2022, provided technical support to scale the national early grade reading program and focused on improving reading fluency and comprehension among students in grades one to three (U.S. Agency for International Development [USAID], 2022). Although EGRP II was not itself a PBL study but its emphasis on strengthening teachers, teaching practices and locally appropriate educational innovation provides relevant background for understanding the broader transformation of teaching and learning practice in Nepal.

Empirical Studies of PBL in Nepal

The literature on PBL in Nepal remains relatively limited compared with the growing body of international research. The available Nepalese studies have primarily examined PBL in relation to students' learning experiences, knowledge development, collaboration, critical thinking and innovative pedagogical practices. This limited evidence base indicates the need for further contextualized study that explores how teachers experience and interpret PBL implementation within their actual school environments. The existing literature also suggests that PBL in Nepal is gradually moving form an innovative pedagogical approach towards a more student-centered model of teaching and learning. The implementation of PBL is influenced by teachers' preparedness, curriculum requirements, institutional support, available resources and the prevailing culture of teaching and learning.

Study on PBL in Nepal primarily explores knowledge development and preferences, focusing on students in technological studies and departments, and their teaching-learning processes related to PBL (Chowdhury, 2015). The focus of the study on technological education also indicates a contextual limitation in existing

literature. Sharma's (2023) study explores teachers' perspectives as well as execution and instruction based on project-based learning in community schools of Pokhara. The enthusiasm of students for STEAM project-based intervention in engineering class was found to be exemplary (Chapagain, 2018).

In addition, several former research-studies revealed that project-based learning was an excellent strategy for transforming students' learning. Thakuri (2023) conducted research aiming to discover whether PBL-based experiential learning might assist students' building critical-thinking capabilities or not. Similarly, another research operated by Widmann and Binaya (2013) examined how students felt responsible for creating their own understanding and participating in teamwork within PBL-based academic environment.

From these studies the PBL strategy is considered in Nepal as a remarkable global instructional approach for the academic transformation. Indeed, the administrative body of Nepal aims to implement critical pedagogies based on learners-centered models like PBL. Nevertheless, implementing these pedagogies may encounter limitations with established instructional traditions, assessment practices, teacher roles and institutional expectations. Thus, Henri et al. (2017) provides useful contextual evidence for understanding the broader pedagogical shift within which PBL can be situated, while also indicating the importance of examining how teachers negotiate these shifts in practice. For the present study this perspective is significant because teachers are not merely implementers of externally prescribed pedagogical approaches; they interpret, adapt and negotiate such approaches according to their classroom realities and professional experiences.

The broader Nepalese literature also points to a tension between the aspiration for student centered education and the determination of conventional teaching practices. Acharya et al. (2020) claimed that many students grew up in conventional instructional platforms in which teachers remained central to the teaching learning process, potentially leaving learners less prepared to assume responsibility for their own learning. Likewise, Bastola (2021) discussed the influence of conventional and textbook oriented approaches on students' learning experiences. These findings provide an important background for understanding why the implementation of PBL may involve considerable pedagogical adjustment. PBL requires teachers to move from transmitting information towards facilitating inquiry, scaffolding learning,

coordinating collaborative work, monitoring progress and supporting students in applying knowledge to authentic problems solving.

The government of Nepal welcomed and highlighted the PBL plan and policy to address students' interests and make pedagogy more respectable throughout the territory and beyond (Giri, 2016). With PBL Nepalese teachers empower themselves to create innovative pedagogies to enable scholars by observing the realm through a problem-solving viewpoint and incorporating learners-centered approaches (Devkota et al., 2017). To encourage learning and creativity in the classroom, many schools in Nepal have also occupied the resourcefulness to flip to a lived education methodology (Giri, 2016). Consequently, the successful implementation of PBL may depend not only on students' willingness to participate but also on teachers' readiness and their capacity to manage changing classroom roles.

Nepalese education has undergone various reforms aimed at developing learners who are capable of independent learning, collaboration, problem solving and application of knowledge. The persistence of conventional teacher centered, and content-oriented practices has continued to constrain the development of such competencies. Sharma (2023) noted that students' learning in Nepalese schools may remain superficial when instructional practices are primarily oriented towards meeting predetermined learning process. This condition highlights the need for pedagogical approaches that provide learners with greater responsibility, autonomy, collaboration and opportunities to apply knowledge in meaningful contexts. In regard, student centered approaches such as PBL are consistent with the broader educational aspiration of developing students' capacity of self-directed learning and teamwork (Nepal & Panuwatwanich, 2011).

The transition towards PBL requires more than a shift in instructional techniques, it requires appropriate teacher preparation, curriculum alignment, school support system and continuous feedback. Evidence from Maldives for example emphasizes the importance of investing in teacher training for effective PBL implementation and indicates that curriculum alignment and systematic feedback can strengthen the effectiveness of PBL for both teachers and students. This evidence together with the Nepalese literature suggests that the successful implementation of PBL depends on the interaction between pedagogical practices and their contextual conditions rather than on the adoption of the approaches alone. Thus, although Nepal's educational reforms increasingly promote student centered and competency-

based pedagogies, there remains a need to understand how teachers experience, adapt and manage PBL within their school contexts. This contextual and experiential dimension is especially important for understanding students' motivation, participation and engagement and therefore provides a significant basis for the present study.

Research Gap

Taken together these international, Asian and Nepalese studies and initiatives suggest that PBL approaches have potential to promote student engagement, collaboration, creativity, inquiry, higher order thinking, autonomy and meaningful learning. However, the Nepalese evidence remains comparatively limited regarding how teachers themselves experience, interpret, adapt and implement PBL in their everyday school contexts. Existing indicatives demonstrate growing institutional and policy level interest, but they do not sufficiently explain teachers lived experiences of implementing PBL or how teachers perceive its influence on students' motivation, participation and engagement in secondary schools. This gap provides the rational for the present hermeneutic phenomenological study of teachers implementing PBL in selected Kathmandu Metropolitan schools.

The review of conceptual, theoretical, policy and empirical literature indicate that PBL has received increasing attention as a student-centered pedagogical approach for promoting active participation, collaboration, autonomy, creativity, critical thinking, higher order thinking and meaningful engagement in learning. International and Asian studies have demonstrated that potential of PBL across different educational settings, while emerging studies and educational initiatives in Nepal have also highlighted its relevance to experiential, inquiry based, competency oriented and interdisciplinary learning. However, the existing evidence remains unevenly distributed across contexts, educational levels and areas of investigation. Nepalese literature provides limited in depth understanding of how PBL is experienced and enacted by teachers within everyday secondary school classrooms.

A significant gap concerns the contextual and pedagogical realities of PBL implementation. Existing studies have examined PBL in specific academic settings including technological education, engineering, experiential learning and selected school contexts. However, comparatively limited attention has been given to how secondary level teachers interpret PBL, familiarize its principles with their classroom realities and manage the practical demands associated with its implementation. This is

important because the implementation of PBL doesn't occur in a contextual vacuum, it is influenced by teachers' preparedness, curriculum requirements, available resources, school support systems, classroom culture, assessment practices and established patterns of teacher student interaction. The existing literature doesn't sufficiently explain how these contextual conditions shape teachers' actual experiences of implementing PBL in Nepalese secondary schools.

A further gap concerns the relationship between PBL implementation and students' motivation, participation and engagement as perceived through teachers' experiences. Although previous studies have reported positive outcomes of PBL much of the existing research has focused on measurable learning preferences. Comparatively less qualitative attention has been developed to how teachers perceive changes in students' motivation, willingness to participate, interest, engagement, ownership and collaboration during PBL activities. Moreover, limited evidence explains how teachers understand and respond to variations in students' engagement when PBL is implemented within the limitations of the regular curriculum and school environment. The review also reveals a methodological gap. Much of the existing literature emphasizes outcomes or effectiveness, whereas relatively limited research has explored PBL through a phenomenological perspective that foregrounds teachers lived experiences and the meanings they construct from those experiences. The remains insufficient understanding of what PBL implementation means to teachers, how they experience its opportunities and challenges, how they negotiate their changing pedagogical roles and how they reflect on its influence on students' learning and engagement.

Therefore, the central research gap identified from the literature is the limited in-depth qualitative understanding of teachers lived experiences of implementation and managing PBL in Nepalese secondary schools particularly regarding their perceptions of student's motivation, participation and engagement within the existing curricular and school context. Addressing this gap, the present study explores the lived experiences of secondary level teachers implementing PBL in selected schools of Kathmandu Metropolitan City through a hermeneutic phenomenological approach. The study seeks to generate contextual understanding of how teachers experience, interpret, perceive and negotiate PBL in practice and how they perceive its contribution to students' motivation and engagement. In doing so, the study aims to

contribute contextually grounded insights to the growing discourse on PBL and student-centered pedagogical transformation in Nepal.

Theoretical and Conceptual Framework of the Study

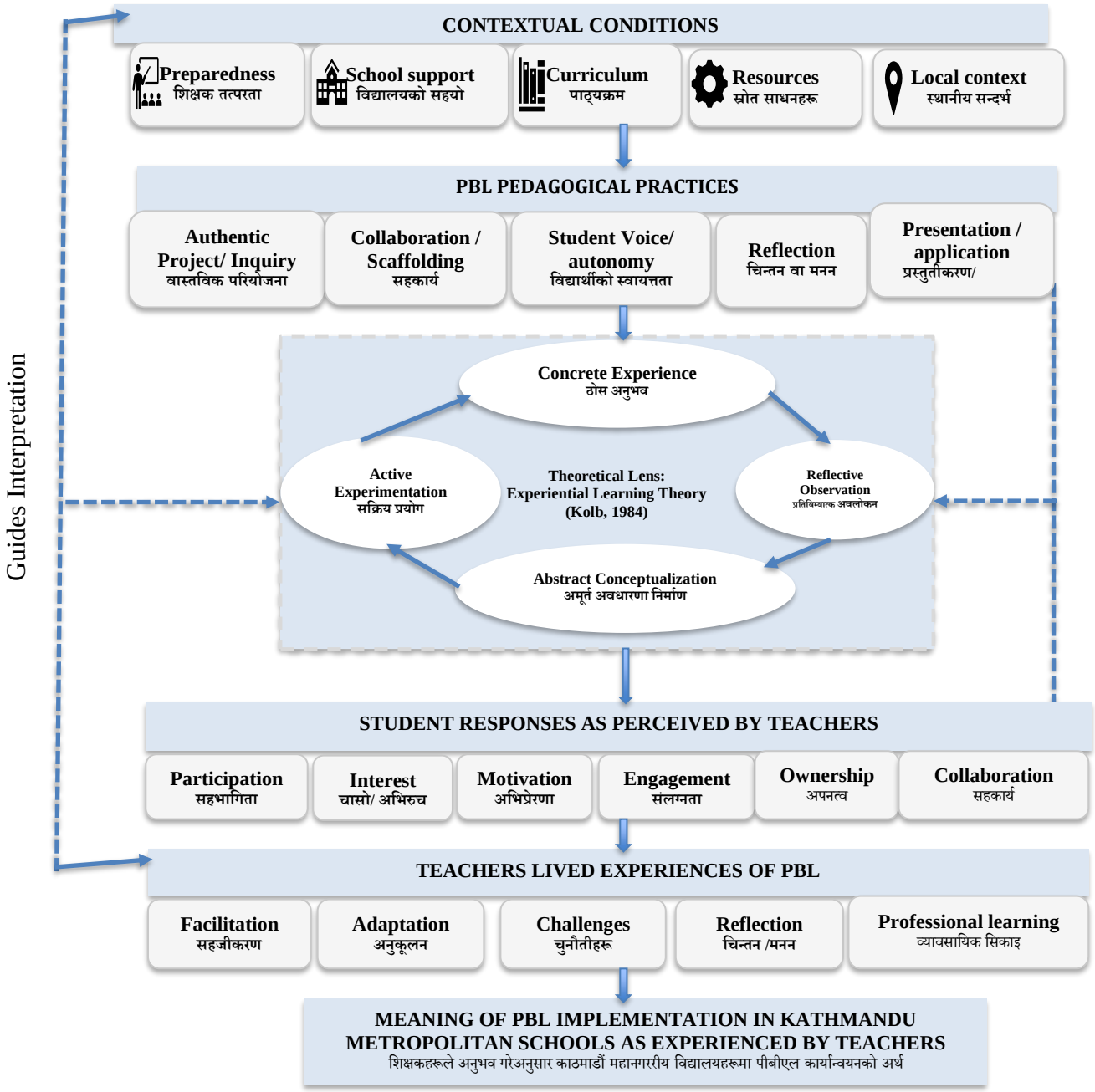
Drawing on the reviewed literature and experiential learning theory, the present study conceptualizes PBL as an experience centered pedagogical process shaped by the interaction of teachers, students and institutional contexts. The framework doesn't assume a direct causal relationship between PBL and students' motivation. Instead, it recognizes that teachers' implementation practices and contextual conditions influence how students experience PBL activities. At the contextual level PBL implementation may be shaped by school support, curriculum expectations, teacher preparedness, available resources and the local educational environment. These conditions influence how teachers design and facilitate PBL.

At the pedagogical level PBL involves authentic tasks, inquiry, collaboration, student voice, scaffolding, reflection and opportunities to apply or present knowledge. Teachers play a mediating role by designing these experiences, facilitation integration, responding to student diversity and balancing student autonomy with appropriate guidance. Students' responses may be reflected in their participation, interest, persistence, collaboration, ownership and engagement. In the present study these responses are understood through teachers lived experiences and interpretations rather than through standardized measurement.

Experiential learning theory provides the interpretive lens connecting these dimensions. Project experiences, reflection, meaning making and subsequent application are understood as interconnected processes through which both students and teachers may develop knowledge. The framework therefore supports an interpretation of PBL as a contextual and experiential practice rather than simply as an instructional technique.

Figure 2

Theoretical-Contextual Framework of the Study



(Kolb, 1984)

Chapter Synopsis

This chapter reviewed the theoretical, conceptual, policy and empirical literature relevant to PBL. PBL was conceptualized as a student centered and inquiry-based pedagogy characterized by authentic learning, sustained investigation,

collaboration, student autonomy, reflection and teacher facilitation. The chapter also distinguished PBL from related pedagogical approaches and traced its intellectual development trough progressive and experiential traditions of education. The literature indicated that PBL may create conditions that support student motivation, participation and engagement, although these outcomes depend considerably on the quality of implementation and the educational context. Teachers were identified as central actors who design, facilitate, scaffold and adapt project experiences while balancing student autonomy with instructional guidance.

Experiential learning theory was established as the theoretical framework of the study. Dewey's experience centered philosophy and Kolb's conceptualization of experiential learning provided a basis for understanding how experience, reflection, meaning making and application relate to PBL. The review of international and Nepalese empirical literature released increasing interest in PBL but identified limited in depth understanding to teachers lived experiences of implementing PBL in Kathmandu Metropolitan school contexts. Limited attention has been given to how teachers experience students' participation, motivation and engagement and how contextual and pedagogical conditions shape PBL implementation. These gaps provide the justification for the hermeneutic phenomenological inquiry presented in the following chapters.

CHAPTER III
RESEARCH METHODOLOGY

Chapter Overview

This chapter presents the methodological approach adopted to explore teachers lived experiences of implementing PBL in selected Kathmandu Metropolitan schools. It describes the philosophical and paradigmatic foundations of the study, the rational for selecting a qualitative hermeneutic phenomenological design, the research context and participant selection, methods of information generation and procedures used for meaning making and interpretation. The chapter also explains the researcher's positionality and reflexive engagement, the strategies employed to establish the trustworthiness of the study and the ethical procedures followed throughout the study process. Attention is given to the interpretive nature of the inquiry, through which teachers' experiences were understood in relation to their professional, institutional, social, cultural and educational contexts.

Philosophical Foundation of the Study

The philosophical foundation of this study is informed by its ontological, epistemological, axiological and methodological positions. These philosophical assumptions guide how the phenomenon of PBL implementation is understood, how knowledge about teachers' experiences is constructed, how values and researcher positionality are recognized and how the phenomenon is explored through a hermeneutic phenomenological approach.

Ontology is concerned with assumptions about the nature of the reality and what is considered to exist within a particular field of inquiry, In this study, the reality of PBL implementation is understood as socially and contextually situated rather than fixed and uniform. The implementation of PBL may be experienced and understood differently by teachers depending on their individual experiences, pedagogical practices, school environments, institutional support, available resources, curriculum and broader socio-cultural contexts (Campos et al., 2019). From this ontological position PBL is understood as an experiential and student-centered pedagogy to teaching and learning that emphasize purposeful activity, inquiry, collaboration, reflection and engagement with authentic PBL inquiry rather than depend on traditional rote memorization. The reality of PBL implementation is considered to

emerge through the interaction of teachers, students, pedagogical practices, school structures and contextual conditions.

The study also recognizes that students' motivation and engagement are embedded within these educational and social contexts. Rather than assuming that motivation and engagement are fixed or independently observable realities, this study explores how teachers perceive and interpret students' interest, participation, motivation, ownership, collaboration and engagement during PBL implementation. Such realities are considered multiple and context dependent because teachers may attach different meanings to their experiences of implementing PBL within their respective school settings (Hadyaoui & Cheniti-Belcadhi, 2023). Thus, the ontological position of this study acknowledges the existence of multiple realities of PBL implementation as experienced and interpreted by teachers within their educational contexts.

Epistemology deals with how knowledge is obtained, how knowledge is constructed, and how it is justified (Audi, 2010). The epistemological perspective adopted in this study is based on the premise that knowledge about PBL implementation is constructed through people's lived experiences of PBL, through interaction with the thing, reflection upon their experiences and interpretation of the occurrence. Knowledge is not seen as 'absolutely objective and independent of the knower'. Instead, teachers within this study are seen as actively constructing meaning through their perceptions, interpretations, and lived experiences of PBL for their schools. So, their accounts are valued as important sources of data and their interpretation of the occurrence would shed light on what PBL entails in their schools. This epistemology aligns with the constructivist view in which we actively create meaning through learning.

The study further acknowledges that knowledge is influenced by the cultural, institutional and contextual conditions within which it is produced. Therefore, the knowledge generated in this study doesn't seek to establish a single universal explanation of PBL implementation. Instead, it seeks to develop an interpretive understanding of how teachers experience and make sense of PBL within selected Kathmandu Metropolitan schools. Qualitative inquiry provides an appropriate means of accessing these subjective and contextually embedded understandings (Zhang & Ma, 2023).

Axiology concerns the role of values, beliefs, ethics and positionality in the study process. This study recognizes that qualitative study is value laden and that the researcher can't be considered completely detached from the phenomenon being explored. The researcher's assumptions, experiences, beliefs and interpretations may influence the process of generating and interpreting knowledge. In this study, I acknowledge that my understanding of PBL, student centered pedagogy, experiential learning and teachers' experiences may influence how I engage with participants and interpret their versions. Therefore, I remained reflexive throughout the study process by critically examining my own assumptions, expectations and interpretations. At the same time, I respected the participants' experiences, perspectives, beliefs and interpretations as valuable sources of knowledge.

The axiological position of the study is also reflected in the ethical treatment of participants. I recognized each participant as a knowledgeable individual whose experiences and perspectives deserved respect and careful representation. Rather than imposing predetermined judgments on participants' experiences, I sought to understand the meanings they attributed to PBL implementation within their own educational contexts. Thus, reflexivity, respect for participants and ethical responsibility were integral to the meaning making process throughout the study.

The methodological position of this study is derived from its ontological, epistemological and axiological assumptions. Since the study understands the reality of PBL implementation as multiple, contextual and grounded in lived experience and views knowledge as constructed through participants' interpretations and meanings, a qualitative phenomenological methodology was considered appropriate. More specifically this study adopted a hermeneutic phenomenological approach to explore and interpret the lived experiences of teacher's implementation PBL in selected Kathmandu Metropolitan schools. Hermeneutic phenomenology is appropriate for examining not only what participants experience but also how they interpret and make meaning of those experiences. Accordingly, the study sought to understand teachers' experiences of nature, implementation, facilitation, challenges, adaptations and perceived influence of PBL on students' motivation and engagement.

The methodological process involved engaging with participants' experiential accounts and interpreting the meanings embedded within those accounts. Through this approach the study aimed to understand the phenomenon within its natural educational and socio-cultural context rather than reducing teachers' experiences to

predetermined variables or measurable outcomes. The methodological orientation is also consistent with the study's theoretical grounding in experiential learning theory, which provides a theoretical lens for understanding learning through experience, reflection, conceptualization and application. While experiential learning theory provides theoretical perspective through which PBL related experiences are understood, hermeneutic phenomenology provides the methodological approach for exploring and interpreting teachers lived experiences of PBL implementation. Thus, the alignment among ontology, epistemology, axiology and methodology provides a coherent philosophical foundation for this study.

Research Paradigm and Design

In relation to the goals, my study was situated within an interpretivist research paradigm and employed a qualitative hermeneutic phenomenological design. According to Pervin and Mokhtar (2022), the interpretivist paradigm was foundational for understanding and interpreting the subjective meaning that individuals attached to their lived experiences of implementing PBL within their educational contexts. Guided by this paradigm, I sought not only to explore teachers' experiences of implementing project-based learning (PBL) but also to interpret how they constructed meaning from those experiences within their unique educational contexts. Consistent with the principles of hermeneutic phenomenology, I acknowledged that lived experiences could not be understood in isolation but required interpretation within the participants' social, cultural and professional contexts. Hermeneutic phenomenology enabled me to engage dialogically with the participants, recognizing that understanding emerged through the interpretive relationship between their narratives and my reflective engagement as a researcher. My interpretations were informed by the hermeneutic circle, in which I moved iteratively between individual accounts and the broader context to develop a deeper understanding of the phenomenon. Rather than seeking objectives of universal truths I interpreted the meanings embedded in teachers' accounts of using PBL to enhance student motivation, while considering the contextual, social, cultural and personal detentions that shaped those experiences. This interpretive process acknowledged that meaning was co-constructed through the interaction between that participants' narratives and my reflective interpretation, making hermeneutic phenomenology an appropriate methodological approach for this study (Van Manen, 2016). My understanding evolved through the hermeneutic circle, moving continuously between individual

experiences and the broader context to develop rich and meaningful interpretations. Therefore, I considered hermeneutic phenomenology to be the most appropriate study design because it allowed me to interpret the essence and significance of teachers lived experiences while enlightening how they understood and enacted PBL as a pedagogical approach to fostering student motivation.

Therefore, I believed that qualitative approach and hermeneutic phenomenological design provided an appropriate methodological foundation for exploring how teachers experienced, understood and interpreted the implementation of PBL and its perceived contribution to students' motivation and engagement in learning.

Phenomenology

Phenomenological orientation of inquiry has shaped my study. It was adopted because the central concern of the study was to explore teachers lived experiences of implementing PBL. A qualitative approach is appropriate for exploring experiences, meanings and interpretations that can't be adequately understood through numerical measurement alone (Creswell, 2009). Phenomenological inquiry focuses on how individuals experience and make sense of a particular phenomenon under study was teachers' experience of implementation PBL and their perceived understanding of its influence on students' motivation and engagement.

Phenomenology has its philosophical roots in the work of Edmund Husserl who emphasized the systematic exploration of lived experience and the way phenomena are experienced through consciousness (Himanka, 2010). Phenomenological inquiry subsequently developed into different traditions, including descriptive phenomenology associated with Husserl and interpretive or hermeneutic phenomenology associated particularly with Martin Heidegger. Descriptive phenomenology primarily seeks to describe the essential structures of lived experience, whereas hermeneutic phenomenology emphasizes interpretation and recognizes that understanding is shaped by context, experience and the researchers' engagement with participants' meanings (Lopez & Willis, 2004).

Although this study acknowledges the contribution of descriptive phenomenology to the development of phenomenological inquiry, I adopted hermeneutic phenomenology as my methodological orientation. This choice was appropriate because the purpose of the study was not merely to describe teachers' experiences but to interpret how they understood and made meaning of PBL

implementation within their professional, institutional and socio-cultural contexts. As individuals interpret their experiences through their existing understanding and context (Dahlberg et al., 2008), hermeneutic phenomenology enabled the study to examine the meanings teachers attributed to their experiences of implementing PBL.

Hermeneutic Phenomenology as My Inquiry Approach

This study adopted hermeneutic phenomenology as its methodological orientation because its central concern was to understand and interpret teachers lived experiences of implementing PBL. Hermeneutic phenomenology, mainly associated with Martin Heidegger, moves beyond simple description of experience and emphasizes the interpretation of meanings embedded in human experiences within their lived worlds. From this perspective experiences are understood as situated within historical, social, cultural and professional contexts rather than as isolated events. In This study I recognized that my own experiences, assumptions and prior learning could influence the interpretation of participants accounts. Therefore, rather than claiming to eliminate my pre-understanding completely, I engaged reflexively with them throughout the study process. The interpretation involved an iterative movement between participants' accounts and the broader context of their experiences, consistent with the hermeneutic circle. This process supported a deeper understanding of the meaning embedded within teachers' experiences (Alsaigh & Coyne, 2021; Crowther & Thomson, 2023).

The interpretive orientation of the study was also consistent with the understanding that phenomenological inquiry seeks to illuminate how a phenomenon is experienced and interpreted by individuals. The participants' narratives therefore constituted the primary basis for understanding the phenomenon while my role as the researcher involved interpreting those accounts in relation to their contexts and meanings. So, hermeneutic phenomenology enabled this study to develop a contextual and interpretive understanding of how its perceived relationship with students' motivation and engagement (Van Manen, 2015).

If the scope of the research is to be increased, I insighted that the analysis can be continued not only at the end but throughout the entire research. The study's use of inductive analysis and emerging themes were pertinent to this context (Eatough & Smith, 2017). Phenomenological analysis provided valuable guidance for this study. It facilitated the development of meaningful and strong bonds with participants, supported to apply interpersonal and subjective interpretive skills to explore their

experiences, and enabled me to narrate findings to be articulated through detailed accounts of lived experiences.

I discovered that hermeneutic phenomenology, in my opinion, was better suited for investigating participants' experiences and actual words, since it leaves room for new identifications to emerge. As a researcher, I set aside potential theoretical assumptions to ensure that participants' descriptions were not influenced by pre-existing frameworks. Instead, my objective was to gain insight into how 'phenomena present themselves to consciousness' (Messas et al., 2023). When I followed up with participants to confirm their agreement with my interpretations, I concentrated on using their experiences to further describe and clarify the phenomenon under study.

In hermeneutic phenomenology, the choice of informants in research and their beliefs, personal involvement and relationships established during the study facilitate the understanding of the real phenomenon. I wanted to understand the reality of a phenomenon without setting aside my biases and prior experiences with the subject, so I used hermeneutic phenomenological orientation.

Furthermore, interpretive thematic analysis was used to organize and develop patterns of meaning form the interviews, while the hermeneutic phenomenology guides the interpretation of those meanings. Thus, thematic analysis functioned as an analytical procedure rather than as an alternative research methodology.

Researcher Positionality and Reflexivity

According to Creswell and Poth (2017), reflexivity is an important aspect of qualitative inquiry because researchers' experiences, beliefs, values and prior understandings may influence how they approach a phenomenon and interpret participants' accounts. In this hermeneutic phenomenological study, I acknowledged that my understanding of PBL was shaped by my personal and professional experiences. Rather than assuming that these prior understandings could be eliminated, I remained consciously aware of them throughout the research process and engaged in continuous reflection on how they might shape my interactions with participants and my interpretation of their lived experiences.

My interest in the phenomenon emerged from two primary sources. First, I had a personal and professional interest in improving pedagogical practices within Nepali educational contexts. Second, my understanding of PBL is influenced by my participation in workshops and training programs related to PBL and student-centered

approaches to teaching and learning. These experiences contributed to my initial understanding of PBL and stimulated my curiosity about how teachers' experiences interpreted and enacted PBL within their own school and classroom contexts. So, I entered the study with a pre-understanding of PBL that informed my engagement with the phenomenon.

Although I approached PBL as a potentially valuable student-centered pedagogical approaches, I did not assume that teachers would experience or interpret its implementation in the same way. I was particularly interested in understanding how teachers made sense of PBL through their own experiences and within the academic and institutional contexts in which they worked. Listening to participants' accounts provided an opportunity to encounter the phenomenon from their perspectives rather than simply confirming my prior understanding of PBL. Through the interviews and subsequent interpretive engagement with their narratives, meanings were developed through an ongoing interaction between participants' accounts, my pre-understanding and the context in which those experiences occurred. In this sense, the research process involved a co-construction of meaning rather than an attempt to establish an entirely detached or objective account of the phenomenon.

To support this reflexive process, I used bracketing as a means of becoming aware of and holding my prior assumptions in suspension as far as possible during engagement with participants lived experiences. Bracketing didn't mean that my previous knowledge and experiences were completely removed from the research process. Rather, it involved critically examining my pre-understandings so that I could remain attentive to participants' descriptions and interpretations of their experiences. I continuously reflected on my assumptions, expectations and responses during information generation and interpretation. This reflexive engagement helped me to distinguish, as far as possible, between what participants expressed and what I might have expected to hear based on my own experiences with PBL.

My interpretation of participants lived experiences was also situated within the broader socio-cultural, educational and political context of Nepal. Nepal's educational reforms have increasingly emphasized student centered, inquiry- based, constructivist and competency-based approaches with attenuation to critical thinking, problem-solving, creativity, collaboration and meaningful participation alongside academic learning. With this context, PBL can be understood as a pedagogical approach that resonates with broader educational aspirations for developing knowledge, skills and

capacities relevant to a changing society. Nepal's educational planning has also emphasized the development of new competencies beyond memorization and rote learning as part of building a knowledge-based society (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2023).

Therefore, I interpreted teacher lived experiences of implementing PBL not only through their individual accounts but also in relation to the educational, institutional, cultural and policy contexts within which those experiences were situated. This contextual orientation was particularly important because teachers' experiences of implementing PBL could not be understood independently of the conditions surrounding their pedagogical practice.

Consistent with the hermeneutic phenomenological orientation of this study, I engaged in an ongoing movement between the particular and the whole between individual participants' accounts and the broader context of PBL implementation, between specific experiences and the meanings emerging across those experiences and between my pre-understanding and new understandings developed through engagement with participants' narratives. Through this reflexive and interpretive process, I sought to understand the meanings teachers attributed to their lived experiences of implementing and managing PBL and to how they perceived its contribution to students' participant, motivation and engagement in learning. Int doing this, researcher positionality and reflexivity were treated not as elements to be completely removed from the inquiry but as integral considerations in developing a deeper and contextually situated understanding of the phenomenon.

Participants Selection

Participants were selected because the study sought to explore the lived experiences of teachers who had direct experience of implementing PBL. Purposive selection was appropriate because participants were required to have experiential knowledge of the phenomenon under investigation and to be able to provide rich and meaningful accounts of their experiences. In qualitative and phenomenological inquiry, participant selection and adequacy was considered in terms of the depth, relevance and interpretive richness of their experiences rather than by numerical representation (Cohen et al., 2013; Mason, 2002).

Six schoolteachers were selected to participate in the study. All participants had direct experience of implementing PBL in their classroom practices and voluntarily agreed to participate after receiving information about the study and

providing informed consent. The participants taught across different subject areas, including English, Mathematics, Science, Computer Science and Nepali. They were selected from three institutional schools within the study setting. Their professional experiences and practical engagement with PBL provided relevant experiential accounts for understanding how teachers experienced, interpreted and made meaning of PBL implementation within their educational contexts.

The competence of the participant group was considered in terms of the depth, relevance and richness of the experiential accounts generated through the interviews rather than statistical representativeness. This was consistent with the interpretive orientation of the study and its hermeneutic phenomenological design, which prioritized close engagement with participants lived worlds. They provided sufficiently rich accounts to support an in-depth interpretation of the phenomenon under the study. The selection process also took account of access to participants and the gatekeeping structures within the selected schools, which can influence researchers' access to participants and research settings (Rankin & McFadyen, 2016).

The participants were encouraged to describe their experiences openly rather than being restricted to predetermined responses. Semi-structured in-depth interviews enabled them to articulate their experiences, perceptions, challenges, adaptations and understandings of PBL in their own works. This approach allowed me to remain attentive to the meaning of participants attributed to their experiences while maintaining alignment with the hermeneutic phenomenological orientation of the study.

For ethical protection, participants' identities were kept confidential throughout the research process. Pseudonyms were assigned; Bimala, Dilli Ram, Dinesh, Paul, Radha and Rhythm gradually to all participants, and identifiable personal information was excluded from the presentation of the findings. Participation was voluntary and participants provided informed consent before taking part in the study. The use of pseudonyms and the careful handling of participants' accounts helped protect their privacy while allowing their experiential voices to be represented in my dissertation. I prepared an account of all teachers who participated in my study and linked them with gender and names according to sequential order as follows:

Bimala is a lower-secondary level teacher who teaches Nepali at selected private school. She has been teaching for eight years and has direct experience of

using PBL for three years with her students. She has been teaching along participating in school-organized PBL training in this school.

Dilli Ram is a lower-secondary level teacher who teaches Computer Science at selected private school. He has been teaching for fifteen years and has direct experience of using PBL for five years with his students. He has been teaching using school-based PBL experience organized training in this school.

Dinesh is a lower-secondary level teacher who teaches Science at selected private school. He has been teaching for eleven years and has direct experience of using PBL for four years with his students. He has been teaching using school-based PBL organized training through school and Kathmandu University in this school.

Paul is a lower-secondary level teacher who teaches Mathematics at selected private school. He has been teaching for six years and has direct experience of using PBL for three years with his students. He has been teaching using experiences of PBL training in this school.

Radha is a lower-secondary level teacher who teaches English language at selected private school. She has been teaching for fifteen years and has direct experience of using PBL for six years with his students. She has been teaching using PBL-related training through TU/KU-linked experiences in this school.

Rhythm is a lower-secondary level teacher who teaches English language at selected private school. He has been teaching for sixteen years and has direct experience of using PBL for seven years with his students. He has been teaching using PBL-related training and experiences in this school.

Method of Information Generation

In my study, semi-structured, face to face interviews were the primary method of information generation. Following the methodological suggestions of Creswell (2009), individual interviews were conducted with participating teachers to encourage a deep reflection on their lived experiences of implementation of PBL within their classroom and school contexts. As mentioned by Seidman (2013), this study could uncover teacher participants' authentic experiences, expectations and behaviors through using open-ended questions throughout the interview. Furthermore, Giorgi (2009) highlighted the importance of engaging participants with concrete descriptions in phenomenological inquiry, the interviews were designed to capture the essence of teachers’ daily teaching practices.

The interview guided by an interview guide formulated in strict relation to purpose and the central phenomenon of the study. based on the study guidelines and the phenomenon under the study. Kvale and Brinkmann's (2009) guideline were designed not as a rigid question-answer exercise but as a flexible tool to immerse the researcher inside the research problem. It focusses specifically on teachers lived experience of planning, implementing, facilitating, managing and reflecting on PBL as well as their perceptions of students' motivation, participation and engagement. This approach provided sufficient structure to maintain focus while allowing participants to introduce unanticipated exercises and meanings, thereby uncovering new insights related to the main goal of the study.

Throughout the sessions, participating teachers were encouraged to describe their experiences in their own words for the purpose of establishing a strong rapport to facilitate openness. In accordance with Whiting (2008), frequent follow-up and probing questions were utilized to clarify the information and explore emerging problems in greater depth. This flexibility ensured that the interviews remained responsive to the participants' narratives rather than being restricted to predetermined responses. Finally, this responsive approach supported the generation of rich, detailed experiential accounts aligning with Langdridge (2008) and the hermeneutic phenomenological framework of Van Manen (1990), which seeks to interpret the deep meanings individuals attribute to their lived pedagogical practices. With the participants' permission, all interviews were recorded audio and written forms to preserve the accuracy and richness of their accounts, and the recordings were subsequently transcribed verbatim for analysis.

Information Analysis and Interpretation

The semi-structured interview transcripts were analyzed and interpreted through a hermeneutic phenomenological approach informed by Van Manen's (1990) phenomenology of practice. The purpose of the analysis was to develop an interpretive understanding to teachers lived experiences of implementing and managing PBL, rather than merely to identify recurring topics within the interview transcripts. Hermeneutic phenomenological analysis involves a reflective engagement with lived experience accounts through which meanings are interpreted in relation to the phenomenon under investigation. So, the analysis in this study involved sustained engagement with participants narratives, their descriptions of experiences and the meanings they attributed to those experiences. The process was iterative, requiring

movement between individual statements, the complete narrative, emerging interpretations and the phenomenon.

The analysis was also supported by thematic procedures described by Braun and Clarke (2006). Thematic description provides a flexible approach for identifying, organizing and interpreting patterns of meaning within qualitative data. In this study, thematic analysis was not adopted as an independent methodological design. Rather its practical procedures were used to support systematic organization, coding, comparison and review of the interview material within the broader hermeneutic phenomenological approach. This distinction was important because the central concern of the study was to understand the meanings of participants lived experiences rather than simply to identify the frequency or recurrence of topics. The use of thematic procedures complemented the phenomenological interpretation of participants' accounts (Sundler et al., 2019).

Following van Manen (1990), phenomenological reflection was central to the interpretation. Significant statements and passages were identified and considered in relation to the participants' complete accounts. Related meanings were then complete within and across transcripts to identify phenomenologically significant themes. I moved repeatedly between the parts and the whole of the text, examining how individual statements contributed to an understanding of the border phenomenon, on the other hand how the emerging understanding of the whole informed the interpretation of statements. Thus, themes were considered not merely as required topics but as expressions of meaning that helped illuminate the nature and significance of teachers lived experiences.

Interpretation and writing were also treated as integral parts of the phenomenological analysis. An accordance with Van Manen's (1990) emphasis on writing and rewriting, I developed rich descriptive and interpretive accounts of participants' experiences and repeatedly revised them considering the transcripts and emerging interpretations. Selected quotations were used to preserve participants' voices and to provide textual grounding for interpretations. The intention was not simply to reproduce participants' statements but to illuminate the meaning embedded within their experiences. In this sense phenomenological writing sought to remain sufficiently close to participants words and contexts while also communicating the interpretive significance of their experiences (Polkinghorne, 1989).

Thematic analysis and interpretive phenomenology were closely connected, particularly in this study where participants lived experiences were analyzed thematically, reflecting their perceptions of the world (Sundler et al., 2019). This corresponded with the phenomenology focus on people's lived experiences (Dowling & Cooney, 2012). In the present study, the thematic analysis method was inductive, and the interview was also used to analyze textual information. The information was collected from participants and determined to develop the theme, and during this analysis stage, it was necessary to make shifts from description text to person's words to convey the importance of lived events.

As an academic researcher, I engaged deeply with the lived realities of the participants to construct a composite narrative that reflects their shared experiences and reveals the essence of phenomenon. Through sustained interpretive engagement with their accounts, I sought to illuminate the meanings embedded in their experiences rather than merely describe events. I composed one to two rich, descriptive paragraphs that stayed close to participants' words and contexts, allowing the phenomenon to be presented in a way that preserves its lived texture. In doing so, I aimed to evoke a sense of immediacy for the reader, enabling them to enter as far as possible into the participants lived in the world and experience the phenomenon through their narratives.

Blaxter et al. (2010) stated that thematic analysis aids in discovering novel concepts and patterns as well as the identification of connections between them to provide context and foster a deeper comprehension of the topic being studied. According to Jupp (2006), interpretive analysis concentrates on the topics, interpretation, and language use to produce more ideal and significant results. Since the information's essence guides the analysis, the participants' language, and their own notions where I employed inductive theme analysis (Braun & Clarke, 2006). Also, I did not just go from one set of information to another in my analytical process; instead, I looked at each piece of information separately and then compared it to other areas. The information revealed codes and themes during the procedure. To explain people's experiences with the phenomenon, I tried to read the information transcriptions with a growth mindset during the analysis phase. As a practitioner-researcher, to prevent my personal opinions and potential bias from influencing the information, I had carefully considered my ontological and epistemological positions before starting the information collection. I read, coded, and highlighted the

information to clarify further. The information was arranged using codes and terms that most effectively convey significant ideas and emerging themes (Creswell, 2009).

Overall, the analysis can be understood as a process of phenomenological reflection, thematic identification, hermeneutic interpretation and writing and rewriting. Van Manen's (1990) hermeneutic phenomenology provided the primary methodological and interpretive foundation, while Braun and Clarke's (2006) thematic procedures provided practical support for organizing and examining the interview material. Through this integrated approach the study sought to develop a rich and contextually grounded understanding of teachers lived experiences of implementation and managing PBL and the meanings they attributed to those experiences.

Analytical Rigor

Rigor in the analysis was maintained through repeated engagement with the interview transcripts, systematic coding, continuous comparison of codes and emerging themes and reflexive examination of interpretations. In qualitative inquiry the purpose is not to establish universal facts or statistically generalizable findings but to develop an in-depth and contextually grounded understanding of participants experiences (Gray, 2021). Here, I served as an active instrument of inquiry, drawing upon methodological knowledge, experience, reflexivity and interpretive skills throughout the analytical process (Patton, 2014).

The analysis was primarily inductive, allowing meanings and patterns to emerge from participants' accounts rather than imposing predetermined categories. Clarke and Braun (2013, 2017), and Barun and Clarke (2006) thematic procedures supported the systematic organization, coding, comparison and review of the interview material. However, these procedures were embedded within the broader hermeneutic phenomenological orientation of the study. I repeatedly returned to the original transcripts to ensure that emerging themes remained grounded in participants language, descriptions and lived experiences.

In van Manen's (1990, 2015), hermeneutic phenomenology, specific attention was given to the meaning of the phenomenon which becomes understandable as lived and experienced. Through phenomenological reflection I considered significant experiential statements and emerging themes in relation to individual narratives and the phenomenon. This movement between the parts and the whole supported deeper

interpretation of what the participants' experiences revealed about implementing and managing PBL.

Reflexivity was maintained throughout the analytical process. I remained attentive to ontological and epistemological assumptions and critically reflected on how these could influence interpretation. This kind of engagement helped me to maintain coherence between participants' accounts, the study guidelines, the philosophical orientation and the interpretations presented with the findings. During the process of information collection, I remained open to emerging insights and continuously reflected on the participants' descriptions allowing themes to unfold naturally from the essence of the phenomenon as experienced by them.

I also maintained an audit trail consisting of transcripts, coding decisions, theme development and interpretive reflections. Emerging themes were reviewed against both individual narratives and the phenomenon. This process enhanced transparency and helped demonstrate how the final interpretations were developed from participants accounts. Therefore, the rigor was established not through claims of mine neutrality but through systematic engagement, reflexive interpretation, transparency and faithfulness to the meanings of participants lived experiences (Van Manen 1990, 2015).

Trustworthiness of the Study

The trustworthiness of the study was addressed through reflexivity, credibility, dependability and confirmability and contextual richness. Because my study was qualitative and interpretive and the quality was considered in terms of the depth, transparency, authenticity and contextual grounding of the interpretations of lived experiences rather than statistical reliability or generalizability. I employed the hermeneutic circle to develop rich and meaningful interpretations and followed Lincoln and Guba, (1986) trustworthiness frameworks. Detailed descriptions of participants' experiences and ongoing reflective self-examination enhanced the authenticity and credibility of the findings. This study aimed to generate a deep and contextually grounded understanding of the phenomenon as experienced and interpreted by the participants, thereby ensuring the quality and trustworthiness of the study.

Credibility

In my study, credibility was supported through sustained engagement with participants accounts, careful interpretation of interview narratives and follow-up

reflective conversations with participants. These conversations provided opportunities to clarify participants' meanings and to examine whether my emerging interpretations remained responsive to their experiences (O'Reilly & Kiyimba, 2015).

Dependability

Dependability was addressed by maintaining a transparent record of the research process. My documented or record procedures associated with participant selection, information generation, transcription, coding, theme development and interpretation (Lincoln & Guba, 1986). This documentation process provided me with a transparent audit trail through which the development of the study process could be followed.

Confirmability

Confirmability was supported by grounding interpretations in participants accounts and maintaining reflexive awareness of my own assumptions and positionality. I repeatedly returned to the interview transcripts to examine whether interpretations were adequately supported by the participants' experiences rather than being based solely on personal experiences (Wellington, 2015).

Contextual Richness

The study provided detailed attention to participants' experiences and the educational context in which PBL was implemented. Such contextual description enables readers to assess the relevance of the findings to other educational settings rather than clamming statistical generalization. The findings were therefore understood as contextually grounded interpretations of teachers experience within the selected study settings (Lincoln & Guba, 1985).

Ethical Considerations

Ethical considerations were addressed throughout the research process to protect the rights, dignity, privacy and wellbeing of the participating teachers (Cohen et al., 2013). Ethical responsibility was considered not only as a formal requirement but also as an ongoing responsibility in the mine and participants relationship. Within hermeneutic phenomenology ethical watchfulness is paramount because unpacking deeply personal lived experiences requires a high degree of vulnerability from individual subjects. I recognized that ethical considerations excel the technical execution of a study design and they establish a moral commitment so safeguarding the participants' wellbeing before, during and after my interpretive dialogues (Gray, 2021).

Institutional Approval

Formal ethical approval was obtained from the Research Ethics Committee of the Kathmandu University school of Education prior to commencement of fieldwork. The required institutional documents and ethical procedures were completed prior to contacting and interviewing the participants.

Informed Consent

Before engaging in interpretive dialogues, the participating teachers received information about the study's purpose, nature of the study, expected role of participants, the voluntary nature of participants and their right to withdraw at any point without penalty and that no financial incentives were provided. During my initial encounters I met with the teachers to establish an atmosphere of trust, rapport building, clarity of my study intent and guarantee absolute confidentiality (Cohen et al., 2013). I clarified that their participation was optional and that they were free to leave the research project at any time without notice.

Confidentiality and Anonymity

To protect their identities within the shared narratives I assigned unique pseudonyms to reach participants, ensuring that their individual identities remained unidentifiable in both the transcripts and the final dissertation presentation. Additionally, participant identification was kept unknown during and after the research study, and participants could not identify or relate to any of the gathered information. Throughout the study process participants' information was treated confidentially.

Information Security

With the participants' explicit permission, audio recording was conducted with participants. The purpose of recording conversational interviews was to capture the exact lived experiences from their spoken words. I explained these recording and information handling procedures during my session and within the participant information sheet. To preserve information privacy, I secured all audio files and subsequent text transcriptions within my digital devices. I also explicitly informed the participants that selected anonymized accounts and interpretations would be integrated into the MPhil dissertation for academic purpose. To respect the sacred nature of the dissertation the educators shared with me, I encrypted all raw data and committed to secure it till the post-transcription. By maintaining these strict security

protocols, protected the right, dignity and personal histories of the participants privacy and maintained the trust with their lived experiences they shared.

Chapter Synopsis

This chapter maintained the methodological foundation of the study. The study was located within an interpretivist paradigm and employed a qualitative hermeneutic phenomenological design to explore teachers lived experiences of implementing PBL in selected institutional schools of Kathmandu Metropolitan City. The philosophical foundation was discussed in terms of ontological, epistemological and axiological positions followed by an explanation of researcher's positionality and reflexive engagement.

The chapter further described the purposive selection of six teacher participants and the use of semi-structured interviews as the primary method of information generation. The interview accounts were analyzed inductively through thematic analysis while the interpretation was informed by hermeneutic phenomenological principles and the movement between part and whole. The chapter-maintained about the procedure used to establish credibility, dependability, confirmability and contextual richness together with the ethical procedures followed throughout the study process. The methodological decisions described in this chapter provided the foundation for interpreting the teachers lived experiences and presenting the findings in the subsequent chapter.

CHAPTER IV
TEACHERS' EXPERIENCES IMPLEMENTING PBL

Chapter Overview

This chapter presents the findings of the study by interpreting the lived experiences of six schoolteachers regarding the implementation of PBL. Information was generated through semi-structured interviews, yielding over transcripts from approximately six hours of recorded conversations. Consistent with a hermeneutic phenomenological approach I engaged in an iterative and interpretive process of reading, reflecting and moving between the parts and the whole of the participants' narratives to uncover the meanings embedded within their experiences. Rather than merely identifying themes and codes, the analysis sought to understand how teachers made sense of implementing PBL, the challenges they attached to this experience in relation to enhancing students' enthusiasm for learning. The findings presented in this chapter therefore represent interpretive understanding of teachers lived experiences, illuminating how PBL is experienced, enacted and continually negotiated within their classroom contexts.

Presentation on Research Findings

The purpose of this study was to explore teachers' experiences of using PBL to enhance students' motivation and learning. The study focused on how teachers experienced and explained PBL from their personal perspectives and how their practices encouraged students to learn. The study involved six teachers from three different institutional schools. The teachers' experiences were explored through semi structured interviews. The interview transcripts were analyzed through an interpretive phenomenological process informed by Van Manen (1990) approach to lived experience. The analysis focused on identifying and interpreting meanings within teachers' narratives and understanding the phenomenon of PBL implementation as experienced by the participants teachers (Byrne, 2022).

For information analysis I followed Braun and Clarke's (2006) six phase framework of thematic analysis including familiarizing them with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report. which contained acquaintance with the collected information, developing preliminary codes, viewing different themes, reviewing

subtopics, defining and renaming themes and lastly developing reports. However, the interpretation of the findings remained grounded in the hermeneutic phenomenological orientation of the study with particular attention to the meanings of teachers lived experiences of implementation of PBL (Van Manen, 2015).

The interview questions focused on teachers' classroom practices, experiences, challenges and ways of implementing PBL. I reflected on and analyzed the information, reading it multiple times to ensure careful evaluation and inclusion of possible themes. I develop sub-themes and categorize information under specific themes to see what the teachers' experience of PBL, how they made sense of their practices and how they use PBL to support students' motivation, participation and learning. These themes were coded and divided into several sections based on research questions (Creswell & Creswell, 2017).

In this chapter, I present the findings related to teacher experiences about implementation of PBL, their practices to motivate students' role, and their experiences in the PBL context in relation to the following study guidelines:

1. How are teachers using PBL as a tool to encourage students' motivation?
2. How do teachers apply PBL instruction in the classroom?
3. How do teachers specifically use PBL to encourage students' participation and learning?

The themes and sub themes which emerged through the participant's lived experiences are organized according to these study guidelines. The presentation of findings brings together participants voice, interpreted meanings and my phenomenological understanding of teachers experiences of implementing PBL. So, this chapter presents not only what teachers did in implementing PBL but also how they experienced, understood and interpreted PBL within their classroom realities.

Study Area 1: How are Teachers Using PBL as a Tool to Encourage Student's Motivation?

Within this study area four subject matter appeared as an answer to the debate and discussions with the participants: a) making use of PBL design elements b) guaranteeing students comprehend the criteria of PBL c) trusting in the advantages of the PBL method and d) concerning the local setting. The exhibited discoveries in the table emphasize the understanding of many strategies which were applied by the instructor in PBL classroom setting.

Table 1

Developing Themes for Study Guideline 1

Underlying idea	Sub- underlying ideas
Making use of PBL design elements	Planning studying goals of the class
	Connecting towards lessons toolkit
	Connecting to the core curriculum
	Picking difficult subject matter
	Ensuring authenticity
	Developing and placing clusters
	Keeping the group size small
	Creating collective agreements
	Making use of intergroup competition
	Exhibiting knowledge of PBL
	Offering engaging subject
Guaranteeing students comprehend the criteria of PBL	Students' comprehension of the project
	Choosing the appropriate time
	Increasing comprehension of the subject
Trusting in the advantages of the PBL method	Enhancing students' ability to communicate
	Increasing the motivation of pupils
	Encouraging cooperation
Concerning the local setting	Linking project subjects to regional context
	Examining actual local issues and obstacles
	Becoming culturally aware
	Developing extracurricular endeavors

Making Use of PBL Design Elements

The lived experiences shared by the interview participants described their implementation of PBL method based on their professional experience and expertise. Teachers accounts revealed a recurring meaning on designing projects using specific

PBL design elements. The teachers acknowledged that meeting the course's learning outcomes should be the primary emphasis of project design. From the phenomenological lens the teachers experience curriculum alignment not as an institutional restriction but as a crucial condition that validates the purpose of experiential learning within their daily instructional responsibilities. Rhythm reflected and noting that the projects need to be aligned with all learning outlines of the contents, and it must link an evidence-driven approach. Similarly, Radha shared her experience of planning, stating, "*I consider the subject matter's validity and its instructional objectives.*" Within this phenomenological dialogue, I emphasized that each project should include clearly defined and meetable learning outcomes and that was a central theme in my discussion with the participants. Bimala declaring "*The objective is to keep to the syllabus because it covers the learning outcomes that must be built in*." She further elaborated that to familiarize learners with the project and broaden their inculcation of the content should be related to the information which they are learning. This demonstrates that, to ensure the effective achievement of learning objectives, PBL themes were connected to the curriculum and learning outcomes by the participants. Furthermore, Paul articulated his own strategy for ensuring this educational synthesis, remarking "*To make sure that learning goals are fulfilled I connect my project outline to the lesson material*." These accounts indicate that teachers experienced curriculum alignment as an important condition for making PBL meaningful within their existing instructional responsibilities. Rather than viewing projects as additional activities outside the curriculum, participants described efforts to connect project work with lesson content and intended learning outcomes. Moreover, every participant mentioned that the chosen project topic should be problem-solving and push learners to start developing a solution-oriented mindset for solutions.

The participant also associated project design with opportunities for students to investigate complex problems and explore possible solutions. Dilli Ram explained this phenomenon by stating that "*learners should be challenged to acquire additional knowledge through the problem under investigate*," In this inquiry driven workplace cognitive friction becomes the engine of student drive. And according to Rhythm, he supports this perspective sharing that "*a question should be posted on a specific subject that challenges students to explore solutions*." Every participant agreed that their project themes should focus on a particular issue that needs to be resolved and

encourage students to ask questions to learn more. Furthermore, they concurred that addressing actual issues in the outworld of the classroom and projects would be more genuine or realistic. For example, Rhythm described this experiential commitment to realism, stating, "*I pay attention to the genuineness of the study projects which I present to my students.*" For Paul, bridging the classroom with external realities establishes a vital educational objective, and he remarked "*it is important to prepare students for real-life solution-oriented projects while they are in the classroom crucial.*" The participants actively concentrated on giving students practical experience by connecting classroom projects to real-life solution-driven situations.

According to the lived reality of the participants, projects were experienced as a continuous process that heavily emphasize teamwork, collaboration and conscious choosing of team members. For instance, Paul reflected on the transformative nature of this shared workspace, stating, "*I motivate my students to act collaboratively within pair and peer work, as they are interested in sharing their findings and ideation report to ignite their classmates in several activities*." All participants of the intervention accepted that within PBL, collaboration and co-creation actions always foster students' studies. Dilli Ram observed these relational dynamics, arguing that "*learners get engaged with each other as per individual interest to highlight their commitment in studying*," implying that collaborative autonomy naturally breeds personal investment.

From this perspective, the participants put their insights about the core characteristics of PBL, where it demands thoughtful group division which helps students to interact collectively and work together effectively. Here Bimala described the relational harmony and competence that can emerge from this setup, stating, "*when learners cluster wise collaborate, they interact in a friendly manner, and the mentor will assist them afterward in a friendly way which improves their stage of competence*." Similarly, Rhythm mentioned that *being within these specific clusters allows students the autonomy to choose teammates, which naturally enables a deep sense of "collaboration and togetherness*."

The participants of my intervention reflected on how the numerical scale of group directly influences individual accountability and peer dynamics. The teachers felt that their methods and strategies to motivate students to create groups were essential for effective PBL implementation. All of them depended on group formation to assess the efficacy of peer work in PBL. All of them believed that a bigger group of

learners should lead to minimal participation as some learners would depend on just a few people, whereas a smaller group of learners may offer everyone an equal opportunity to engage in collaboration. Accordingly, the learners' groups were standardized to three members. Bimala justified this deliberate structural limitation, stating, "*I do not gather many of learners in a group to meet and greet, think pair and share since one of them will be unnecessary. Therefore, a team of three will be sufficient*." Here, Rhythm reinforced this lived strategy, emphasizing that "*the team ought to be capable of functioning effectively when they are pocket-size in number*."

Furthermore, the participants actively managed the internal diversity of the groups to deal with bench-partners, organized inter-group tournaments, recognized achievements and classified students based on their abilities. The participants agreed that categorizing students based on their talents increased interdependence among them. Students with high ability mentored and supported others with lower ability. Indicating students based on their talents was related to teachers' understanding of students' strengths and limitations as well as their points of accomplishment. Dinesh mentioned this deliberate balancing act, noting, "*I allocate the teams and identify their skills, then create a group with students who have a mix of strengths. Thus, the powerful are guiding the most vulnerable in activities*." Additionally, Dilli Ram stated, "*I ensure there's a variety of student skills in the group to help one another*." Each one of the participants expresses a clear willingness to develop the learners group combining different competences to enhance co-creation and peer learning.

When establishing these group connections, it fosters the roles and responsibilities of every member. Few roles denoted were group managers and authors. All of them sensed that panning collaboration within members promotes constant activation of members' work. Scheduled work and actions for breaking the regulations were also included in learners' engagement which enabled them to oversee disciplinary actions. Dinesh mentioned a striking insight into this student-led governance: "*Students have the right to eliminate the members of their team, but it is important to give reason and meet each other to work things out*." This experienced reality shows that students can decide how to deal with the group problem, however the teacher-mentor was there on hand, ready to step in scaffolding the process to step in when things become tough to navigate alone.

Additionally, the participants emphasized that the initial traction and long-term momentum of PBL heavily depend on reaching a benchmark on selecting

obvious, attractive and engaging project themes for learners to create significant interpersonal connections. For instance, Paul illustrated this by noting, "*Projects should bring students towards the areas they want to do and something that connected with them*," again Rhythm clarified this focus on comfort and interest, observing, "*Which subject-projects are more comfortable with learners that brought them together and inspire them to discover more about it*." Paul further connected this everyday practice, stating, "*I always look forward to the themes that draw learners' attention and basically speak to them*." Additionally, Bimala sums up this essential design element by clarifying that "*relating the project to a subject or areas they want to explore and are well known is the most essential element of a genuine practice*." Collectively this rich narrative demonstrates that for these teachers, making use of PBL design elements is an intentional, lived act of creating an attractive, structured and collaborative learning ecosystem that respects both student agency and academic boundaries.

Guaranteeing Students Comprehend the Criteria of PBL

The participants in my study often maintained "students, means students' comprehension", indicating that to employ this strategy all projects need to be created to enhance students' comprehension of what it requires. All of them concentrated upon the right moment of PBL within the academic timeline as well as how to introduce it to students to achieve this goal. According to participants lived experiences, the optimal stage for students to fully comprehend the course materials and get interested in it is towards the middle of the course semester. This intentional timing served as a meaningful compound; students were motivated to begin and finish the project because of the foundational clarity. The teachers described that the first half of the term, leading up to the middle of it, is experienced as a crucial phase of introduction and preparation. During this semester, students introduced fundamental strategies, giving them the opportunity to gain a thorough comprehension of subject matter before diving into open-ended inquiry.

Mentioning the instructional approaches to foster students' stage of ability, Dilli Ram (pseudo name of participants) highlighted the importance of "*Choosing the right moment to equip learners with essential background needed to finish a special task, ensuring that they possess a solid grasp of learning content and the ability to accomplish the PBL tasks*." The teachers described that students' comprehension of the project guarantees their effective accomplishment of the study objectives, turning

abstract guidelines into lived practices. For instance, Paul maintained that "*the given project should strengthen students' studying which foster more deepen comprehension of the subject matter*." Rhythm similarly focusses on the cognitive growth during this phase, maintaining that "*students could grasp specific terms related to project developing*."

All members of my intervention concurred that it is essential for students to go with clear-cut comprehension about the project earlier it begins and initiates their purpose, reducing anxiety and fostering ownership. Radha reflected on her proactive classroom practices, stating, "*I constantly ensure that students' comprehension about the project requirements when they are presented for them in the classroom*." Similarly, Bimala added a reflective, student-centered dimension to this understanding, noting, "*I ensure that I recognize the platform of every pupil and their capacity to comprehend*." Paul added to this by focusing on introductory scaffolding, sharing, "*A brief coordination for the students will guarantee their comprehension while I tackle project assignments*." In these descriptions, all teachers concurred that comprehending the project obligations foster a crucial aspect in the successful utilization and execution of PBL.

Trusting in the Advantages of the PBL Method

The participants of my study shared the deeply held concept that PBL proposes special, transformative advantages for the students. Through their personal practices, they come to the point that the profitable usage of PBL fosters the enhancement of students' multi-dimensional abilities, for example, their comprehension ability across communal collaboration with their study partners. Here, talking about the lived advantages of PBL within the classroom ecosystem, Dinesh stated, *"When students start working with pair-peer they feel more motivated and encouraged*," emphasizing the positive socio-emotional impact of PBL on students when they start participating in pair-peer action to application of the project. Again, Paul mentioned, "Students collaborate one another and express their view during topic selection," which further highlights the idea of collaborative effort as a key advantage where students experience a shared democratic space for learning in PBL. Radha also observed this essential shift, stating, *"Students show interest while participate with classmates in actions of project.*" Additionally, Paul observed how collective intelligence reduce cognitive load, noting that "*in difficult projects, students*

collaborating in pair can contribute more effectively which encourage to engages and enhance motivation on them."

Participants in my study acknowledged that collaboration in PBL leads to increased predictability, shared resilience and heightened success in completing complex assignments. They reported that they essence motivated and felt a sense of pedagogical fulfilment in classes while and after utilizing PBL. For instance, Radha shared that "*they were more inspired and excited to complete the assignmen*t." And Rhythm acknowledged this visible transformation, stating, "*Yeah, students are excited which is evident, identified in my teaching*." Rhythm continued his phenomenological reflection, sharing, "*When my students are collaborating on projects with their classmates, they sensed more inspired. Currently, they are applying what they have learned*." Radha also maintained a similar positive outlook, noting, "*students of my classroom are studying in a form of collaborative pathway at present, and they are excited to learn from co-creation with each other*." All my participants accepted that there are numerous advantages embedded within the PBL instructional technique, including raising students' enthusiasm, strengthening collaboration and team spirit and developing humane solutionary skills. All of them gained a favorable option of application and going around with PBL activities, which ultimately solidified their lived experiences, making them deeply trust in core constructivist principles and advantages.

Concerning the Local Setting

The participants come to the points that connecting PBL towards the local setting played a vital role in enhancing students to inculcate these methods within their lived educational experiences. When projects subjects are linked directly to the regional context, it starts to support students in blending practical classroom actions with real-world experiences. The participants trust that when students connect their project to the regional context, they will have the opportunity to work on worthwhile initiatives that will inform them about living life beyond school walls and the regional context surrounding them. The participants agreed that PBL benefited students deeply when project subjects were related to regional problems in Nepal. Paul explained this pedagogical intentionality, sharing, "*We choose regional contemporary context in an effort to make them relevant with their community setting*." In addition, Dilli Ram clarified this experiential approach to challenging students within their native environment, stating "*I am attempting to be focus on connecting my students with the*

tasks (projects) that set obstacles and difficulties in the actual world. We get a lot of ideas from Nepal's private school setting."

To make conform that students' studying is relevant to the local situations connecting or adjoining to them, the participants emphasized the significance of using the local setting problems as the core starting point of inquiry. Rhythm stated, "The duty of us as PBL facilitators and the function of the academic institution is to incorporate the learners real-world and life circumstances." Here Dinesh clarified how this connection fosters both innovation and cultural awareness, noting:

> *I inspire my learners to search something new and burning issue and encourage them to do somewhat novel in many of the project related actions and which I focused on to become culturally aware in Nepal and instruct them to find issues or an opportunity where they can design their prototype on them*.

The participants emphasized how crucial it is to use the PBL strategies while concentrating on regional contextual issues and obstacles to make learning meaningful. Radha examined this phenomenon from a structural perspective, stating, "*A special paradigm that the project has to establish is to deal with a regional issue and use a blueprint to handle regional difficulties*." According to Dilli Ram, the cognitive harvest of this place-based approach is significant, as he observed, "*Students are capable to develop an insight or an assessment from identifying contemporary regional difficulties and obstacles*." And Paul added, "*It is crucial to develop ethnic or inclusive-emphatical links*."

Additionally, the participants emphasized how crucial it is to connect the project themes to the instructional materials (toolkits) to impower and improve reliability of their PBL practice. For instance, Bimala shared, "*I aim to concentrate upon whatever regional issues and concern that is relevant to my instruction some manner to involve my learners in presenting issuers and discovering the way-out*." Most of the participants of my intervention approved that PBL assisted students in identifying contemporary regional obstacles in their communal phenomenon to bring out solutionary strategies for social burning complications.

All participants acknowledged that when choosing project themes, they took cultural sensitivity and the student's cultural mindset into account, interpreting the classroom as a pluralistic space that demands mutual respect. Rhythm mentioned this ethical responsibility during his interview:

> *I frequently instruct them if they have a plan to choose a particular theme of the project, need to be respectful of other social practice, culture and creed and take their own communal practice into account. Because this social doctrine plays a significant role towards education. The regional context comes first and if the content goes beyond the culture and creed won't be discussed.*

This demonstrates the significance of sticking to contemporary morals and traditions since the participants were thoughtfully considered regional cultural components and appropriately connected project themes with the local traditions. Along with the academic direction that was given when they joined the educational institution, which covered the regional ethnic subject matter, ethics and practices, this additional helped the members become more aware through the present regional background.

Every member emphasized that their own school started several campus-wide events to get students involved and get connected in the regional social neighborhoods. For this, Paul clarified, "*We basically try to relate to meetings, fairs, trade shows and industrial environmental occasions because it is a multinational atmosphere. We are adding a greater number of regional students to provide an individual viewpoint as well*." Again, Paul mentioned his efforts to immerse students into local celebrations, noting, "*We especially provides the invitation to the students for the purpose of letting them attend regional contextual celebrations aiming to make possible to feel as connected to the community as I am able*." The participants thought that these experiences improved students' educational experience far beyond the school campus and encouraged their engagement within the community around them.

It is noteworthy that the participants were capable to assist students to become effective comprehensive about the world surrounding them and connecting them to the project subjects aims. It is because they can build their prior expertise and curiosity by granting students the chance to link more with the contextual surrounds. All members didn't demonstrate any significant change among their instructional contents. It is because of prior experience or knowledge of the indigenous Nepali culture and creeds that which they describe as a collection of customs, principle and values. Additionally, teacher-mentors pushed students to acquire knowledge concerning the globe, surrounding them and develop growth mindset, analyzing and raising open-ended interrogatives to make judgments that shifted from rote-learning to

active engagement and students centered. These methods help to discover to enhance students' creative thinking and imagination to meet the disciplinary intended studies objectives.

To maintain the flow of students, it was found that teachers had uses planning the study goals, connecting with the lesson toolkits and curriculum, schooling the difficult subject matter, perform genuinely to the students, time selection, showing cooperation among with the students, and be sensitive to the culture. According to Khamouja et al. (2024), PBL helps in maintaining the flow of students within the learning process. Their study shows every student who was engaged in PBL correlated with their motivation.

Study Area 2: How Do Teachers Apply PBL Instruction in the Classroom?

Following the detailed field conversation, focus group discission and comprehensive interviews four main themes emerged regarding the instructional application of PBL: a) Facilitating interaction b) Keeping teachers inspired c) Making accommodation for students who have learning difficulties (LD) d) Implementing strategic instructional scaffolding. The discoveries displayed in Table 2 highlight the nuanced understanding of many diverse strategies which were applied by the teachers within the fluid boundaries of a PBL classroom setting.

The participants explained that their primary motivation for implementation of PBL was to actively cultivate these interconnected domains. They interpreted the pedagogical shift not as a mere alteration of daily lesson schedules but as a deeper re-imagining of facilitating interaction, keeping teachers motivated, structural support systems which try to be covered in depth in the passages that follow.

Table 2

Developing Themes for Study Guideline 2

Underlying idea	Sub- underlying ideas
Facilitating interaction	Monitoring the status of task execution
	Engaging students in the schoolroom
	Offering comment/feedback
Keeping teachers inspired	Being motivated to instruction
	Developing an interest in the subject
	Changing up the methods of instruction

Making accommodation for students who have learning difficulties (LD)	Identifying the function of counseling unit Providing students with learning difficulties with more authority in the schoolroom Assigning collaborative project for LD students Promoting engagement from LD students
Implementing strategic instructional scaffolding	Improving students' level of ability Expanding on students past knowledge Guiding-mentoring students

Facilitating Interaction

Each of the members emphasized how important intersubjective interaction is to maintain students' enthusiasm and involvement through the open-ended path of PBL. Rather than occupying a distant position of PBL, the teachers experience their roles as deeply relational facilitators who continually co-navigate the learning path alongside their students. Rhythm reflected on this close instructional proximity, emphasizing, "*I ensure to remain in touch with my students so they can comprehend each phase that they undertake during the project."* From a phenomenological stance, interaction serves as a vital monitoring mechanism that transforms tasks into active dialogue. According to Bimala, this continuous communication forms the cornerstone of effective facilitation: "*Interacting with students to inquire about their developments is the primary indicator*." A further instance came from Paul, who described how an approachable presence bridges the gap between curriculum demands and learner agency, sharing, "*Keeping an open communication or interaction with my students promotes the connection between them in studying*." And he expanded on this lived commitment, adding, "*I went through it and I'm constantly available to assist students, ensuring that their process of learning on proper pathway or not.*"

The participants approved that interaction was crucial to see whether students are genuinely interested in studying and capable of carrying out their collective tasks effectively. Additionally, the participants stated that students' intrinsic desire and enthusiasm were seen whenever they set aside space to inquire about the issues and independently discover new information. For instance, Rhythm recalled, *"I observe how my students visiting my office and spending time to interact with me about their*

tasks (project).” Radha further captured this heightened engagement within the classroom lifeworld, stating, “*I notice that my students are more dedicated to participating in the schoolroom and inquiring more about their tasks.*” The participants in my study accepted that students’ determination and intellectual involvement can be seen in PBL homerooms due to these effective and multi-layered interactions. It was important to note that the teacher participants were instructing language (English) to native students. This specific context enhanced learners’ communicative engagement during PBL without unpleasantly affecting the way teacher participants interacted with their class students, which in turn absolutely influenced the participants’ professional experiences when employing these innovative methods of instruction.

The teacher participants involved in the information collection thought that it was important to give students continuous formative feedback throughout the project to foster long term engagement and keep them interested. Rhythm described how this practice extends into collaborative peer reflection among faculty members, noted, “*I basically interact with my colleagues about the challenges faced by the pupils and make the space to share their way out to proper execute the task or project*.” Dilli Ram justified this continuous observant presence in the classroom, sharing, “*I continuously monitoring and observing and providing students my feedback on their achievements.*” This formative guidance helps student identify their own cognitive boundaries, as Bimala stated, “*My learners should be aware of ineffective spots where they require extra attempt to change*.” The participant trusted that regular constructive feedback allowed pupils a clear path on their achievements in applying tasks to identify whether their current strategies are strong enough to perform adequately or if they require extra excellence to carry out their projects successfully. For instance, Bimala mentioned the positive emotional resonance generated by this scaffolding, noting, “*Whenever my students are allowed to get comments from my side regarding their applied tasks, the reaction from them become favorable and cherish their memories of discovery*.” Dilli Ram emphasized these reciprocal dynamics, stating, “*learners provide comments on my instructional procedure in the school, and I build the corrections to energize their achievement.*” Rhythm supports this view mentioning, “*I accept the comments from my learners in what manner I encourage them.*” Finally, the participants accepted that delivering students with good,

constructive comments was a structural guarantee of effectively encouraging their deep involvement in studious tasks.

Keeping Teachers Inspired

The participants sensed that student's classroom motivation is intrinsically tethered to the emotional and professional inspiration of the teachers themselves. In the lived reality of the teachers, demotivated teachers can't cultivate an inspired cohort of students. They recognized that teachers must pour significant emotional and cognitive effort into the students and thus self-esteemed, passionate teachers was far more possible to nurture an enthusiastic peer group of students. Providing an example of this energetic investment, Radha stated, "*Without ample of enthusiasm it is impossible to work along with my pupils in the classroom.*" Similarly, Paul connected personal alignment with instructional success, saying. "*I would be wiser to perform my willingness on to the theme*", which demonstrated that those who want to foster deep student involvement in tasks must be authentically fascinated primarily into the tasks. Additionally, Dilli Ram described his continuous search to avoid pedagogical stagnation, sharing, "*I continually searching for novel ideas to get me involved and involved my students",* and again he continued on this, emphasizing the transmissible nature of enthusiasm: "*It is important to remain enthusiast all the time to encourage and make students enthusiastic.*"

The participants also gave their opinions about the specific personal techniques they deploy to sustain their internal inspiration and bypass routine exhaustion. For example, Dilli Ram shared his strategy of chronological variation to maintain personal interest, saying, "*I prefer to design various projects in each school terms to involve self into novel initiatives as well as to bypass the emerging tardiness.*" Dinesh explained how reflective writing acts as a source of creative renewal for his practice, saying, "*I jot down self-practiced story, which gives me the pleasure to revise and develop new ideas and instructional applications for further innovation.*" Paul similarly reflected on the necessity of introducing creative interventions when the classroom atmosphere feels stagnant, stating, "*I basically have to have a novel act and concepts whenever I felt the situations went dull, as somewhere I fail to put concentration.*" The participants confirmed that they need to continuously develop varying teaching skills and adoptive methods to actively engage both themselves and their students in their classes. Here, Dilli Ram clarified this core phenomenological need for continuous instructional innovation, "*To maintain the*

project more evolving and interesting it's very important to be innovative when planning and bringing things fresh in instruction and not to remain on single task but to revise it continuously."

This intervention brings forward that the participants trusted they desire deep personal inspiration to effectively motivate their students in PBL activities. They remained excited to break the rigid, regular schedule of their traditional classrooms and displayed a strong determination to continuously revise their instructional approaches to make conform of their self-inspiration remain vibrant and complete.

Making Accommodation for Students Who Have Learning Difficulties

Globally, the learning difficulties (LD) refer to the lived experiences of students who went through complications with thought and logical managing. From an interpretative perspective, the inner working of brain function has been defined by Fry and Hale (2000) and Weiss et al. (2016) through the effectiveness of the requisite project. These projects inherently incorporate linguistic interaction, analytical reasoning, the retention of information and the speed of being critical. Here as a researcher and innovative person immersed in this study, I gained deep insights into the specific barriers that were encountered by students with learning difficulties while applying for PBL.

But a significant phenomenon observed during this study was the existence of variations and differences in the description and comprehension of learning difficulties among the teachers' participants. Through the explanation and knowing from the teachers' participants specific barrier for communication and students internal fear were clearly observed as learning difficulties that seriously affect education. To inspire and empower students at the time of implementing PBL it is necessary to address these effective and communicative obstacles.

The participants considered it their core duty to boost the enthusiasm of pupils who have learning difficulties by using PBL. They shared pedagogical lived experience revealed that if these students were included in teaching learning activities, they could be more engaged and perform at the level of their peers. However, they also acknowledged the reality that students with learning difficulties face various learning barriers, and it is evident that such students need additional, structured support to successfully complete tasks through PBL activities.

In this context, the participants emphasized the profound importance of educational institutions in helping students who are struggling to understand PBL

related matters. They strongly stated that the counseling department should provide a student support system to assist students facing difficulties in their studies. The lived workflow of this institutional collaboration is vibrantly captured by the participants: Paul clarified, "*We are usually informed by the counseling department if any learner is having learning challenges and I need to pay more attention to this*", and Dinesh added, "*The counseling department informs us about very important and special cases in our class that need to be addressed.*" According to official communication and the letter from the counseling department, the participants had actively collected detailed information about the learning challenges and learning patterns observed in students' classroom teaching. While conducting activities using PBL, they continuously tried to ensure students' motivation by adjusting their instructional environment for the students facing such leaning-related problems in their own classroom teaching.

To support students facing these intense teaching and learning challenges, the teachers used various motivational strategies within their classroom. Reaching out quickly to those students who are struggling and giving attention to them as quickly as possible emerged as crucial factors for sustaining student motivation. For this, Bimala shared her individual practices, saying, "*The best or more effective approach is to give them responsibility and make them active in peer work.*" Radha clarified her individual approach regarding support system, saying, "*I go back and give attention to each one individually*." Providing attention to those students who are struggling and reaching out to them as quickly as possible is very important for motivation. Paul observed the collective dynamic, noting, "*What happens here is that pupils who have learning challenges are included in peer work and to improve the project and make a difference, I assign tasks to peers with diversity.*" Rhythm clarified her continuous pedagogical vigilance, saying, "*I have to continuously observe the work they create and do.*"

Reflecting and exploring their personal perspectives, the participating teachers deeply discussed how to adjust for students who experience difficulties in classroom learning. For the benefit of their own teaching practice, everyone firmly agreed that all students facing learning difficulties should work in groups where they can interact, communicate and learn directly with their peers. The phenomenon shows that it can be considered very important to include students with learning difficulties in such group activities to promote their development and enhance their knowledge and skills.

As previously noted, there was a clear disagreement and divergence among the participants regarding the precise definition of learning disability. This tension highlights the complexity of identifying needs in real time classroom setting. For instance, Paul stated his lived experience regarding neurodivergence, saying:

> *Students with autism frequently don't want to share in classroom literacy conditioning due to social anxiety, so I need to be aware and always sensitive to no putting them in similar situation, but it's delicate to determine for sure how this affects their conversation.*

Likewise, Bimala explained the emotional needs of the learners, noting, "*Some learners are looking for special treatment in the classroom learning, but when they don't receive environment, they remain anxious because they are struggling with learning*", again Bimala further added emphasizing the need for dialogic collaboration, saying, "*In the context of disabilities, many discussions need to be made to have as much debate as possible. We along with the counselors find out which disabilities need to be more attention of not*."

This kind of action and continuous debate help to ensure whether students identified with learning difficulties are genuinely accommodated in the classroom teaching. Additionally, it confirms whether the teachers' participants have actively collaborated with the counselling department regarding this PBL project.

Implementing Strategic Instructional Scaffolding

The participants strongly believed that it is necessary to follow a definite approach and practices to increase students' motivation by using PBL. The participants mostly mentioned that these and similar practices play a significant role in increasing students' engagement in learning activities. Within this framework, I paid close attention towards 'instructional bridging/scaffolding' for this area because the experiences of PBL method can be considered to help students complete some of their own difficult tasks on their own during teaching and learning activities (Singer et al., 2000).

The participants used the PBL approach in the classroom to adopt certain approaches and practices aimed at improving students' learning activities. They firmly believed that the main elements that increase motivation and engagement in students' learning are PBL tasks. Simultaneously, they also considered equally important to progress by enhancing students' skill levels in classroom work before fully implementing the projects into action.

Paul emphasized this philosophy of scaffolded autonomy, saying:

Instead of providing them with all the materials needed for learning or instruction I design projects in such a way that they can develop their various learning-related skills on their own and acquire some new skills as well. The main outcome of this is what they are learning. They themselves should become experts in the subject matter of the project, its application and in learning-based activities.

This above-mentioned explicitly shows that many participants believed that it is preferable for students to begin their PBL work prior to improving their skills because this helps beginners in improving and promotes the learning process.

In addition, all teacher participants strongly agreed that students' prior knowledge and individual interests play a significant role in how they connect with the topics and goals of their projects in various ways. For instance, Rhythm highlighted this connectivity, noted, "*I create project works based on what pupils have already learned because it serves as the foundation of their learning.*" Bimala added her experiences about knowing child, saying, "*Having prior information or knowledge about students learning helps me as a teacher to develop various project activities based on it.*"

The participants agreed that their students' prior knowledge played a significant role in implementing PBL which also allowed them ample opportunity to create new materials for instruction. For instance, Radha explained the curriculum connection: "*You need to ensure that pupils project work is related to the academic content*", which indicates how well the participants linked to what the students had been previously instructed. Dilli Ram noted, "*If the pupils have prior knowledge or experience it becomes easier for me to bring project-related activities into the classroom*." Dilli Ram included his lived experience of motivation for learning, noting, "*I motivate my pupils to communicate curiosities regarding some aspects of their lives*", Bimala further gave an explanation of lived action, including, "*Students should build relationship with each other, and I help them by motivating them to take on challenges and engage in working together with friends to support on another.*" The teacher participants concluded that to motivate students to learn it is very necessary to connect PBL directly with their prior knowledge or experience.

The participants thought that in the use of PBL instruction the role of teachers was to act as a collaborator, facilitator and mentor and that they are no longer at the

center of learning in PBL. The lived experience of shifting from an authoritative figure to a supportive guide represents a fundamental transformation in their pedagogical identity. As Paul cited, "*I change myself into facilitator/mentor rather than turned into a teacher-manager*", which shows that the participants developed a different strategy for instructional management expertise for their classroom to scaffold students in study. This experiential shift allows teachers to walk alongside their students rather than directing them from above. Radha reported a similar collaborative stance, stating, "*We play a role of mentor advocate about the situation and processes of the tasks*."

Through this shared understanding, most of the participants agreed that they started to give social learning platform for students to complete their PBL assignments. This relational environment requires clear frameworks to ensure that students feel secure while exploring new ideas. Within this co-created space, Dilli Ram explained, "*I established the expectations for each pupil's tasks completion"*, and Radha said, "*I assist my pupils and tell them about the standards of their tasks*." Furthermore, ensuring student agency within these standards emerged as a core element of mentorship as Rhythm described, "*I always mentored my students to choose themes what they like most to involve.*"

The participants provided the necessary support to increase their students' interest, enthusiasm and active involvement in the learning process and to ensure it was maintained throughout the project lifeworld. Likewise, each participants took the initiative to delegate responsibilities to students as much as possible to make them more responsible. Reflecting on this growth of student autonomy, Paul mentioned, "*Pupils able to be aware and remain skillful for search their capabilities to execute the given tasks*." To sustain this awareness the participants maintained continuous dialogue to help students navigate emerging difficulties. Rhythm explained the lived experience, saying, "*I will talk more about the difficulties that pupils are facing and make sure to have a clear understanding of how they plan to move forward with the project work*", and Dilli Ram maintained about learning from lifeworld, noting, "*We negotiate with students and motivate them to begin collaborating and co-creation with classmates*." This dialogue expends all the way to the final stages of the PBL, ensuring that students can confidently share their achievement. As Rhythm additionally mentioned, "*Students must always be dedicated to preparing their project presentations and it is our responsibility to guide and mentor them properly so that*

they can become excellent presenters." Finally, the participants clarified that providing instructional bridging/scaffolding for students' learning helps increase their motivation and knowledge regarding teaching, learning and PBL work.

The second theme which I developed from the participants' interaction was facilitating instruction. Within this thematic horizon, I found that teachers have used specific instruction strategies like monitoring the status of students' tasks, giving feedback, helping them in developing the interest in the task, promoting engagement with the task and bridging the knowledge gap. These interactive practices show that facilitation is an active, ongoing engagement rather than passive observation. This aligns with the work of Giri (2016), who notes that teachers engaged with students in multiple ways such as creating a supportive learning environment as a vital means of instruction.

Study Area 3: How Do Teachers Specifically Use PBL to Encourage Students' Participation and Learning?

Table 3

Developing Themes for Study Guideline 3

Underlying idea	Sub- underlying ideas
Acknowledging the impact of student and instructor freedom	Students' freedom in choosing courses
	Students' ability to face challenging projects
	Degree of instructional command exercised by teacher
	Autonomy in teachers' instructional activities
Strengthening cooperations	Significance of instructor cooperation
	Barriers among instructor cooperation
	Organizational chart (organogram)
Depending on self-esteem of teachers	Teachers' proficiency
	Teacher's attitude

Acknowledging the Impact of Student and Instructor Freedom

In the classroom the use of acknowledgement mentor-mentee freedom method is influenced by how teacher participants view themselves and their position when

using PBL. The study findings revealed that some participants had supported and encouraged students' autonomy in the classroom, additionally, some had allowed students the freedom to choose topics, create and apply high-quality solutions, control project techniques and in some cases to decide with whom and how to collaborate. Within this interpretive horizon of autonomy, some participants felt that students had chosen meaningful subjects and had ownership on their learning. Radha captured this lived experience of shared choices, stating:

> *I gave my students the opportunity and option to choose what project might be suitable for them and to find solutions, and my idea and method along with this decision gave them the freedom to create the right resolutions for themselves.*

Rhythm explained his pedagogical carriage in supporting this independence, saying, "*My expectation for my pupils is to begin selecting of their project themes.*"

Rather than protecting students from difficulties, the participants provide access to resolve task-based problems directly. Paul shared how he navigates these moments, saying, "*If I see something very challenging, I will bring it to the pupils' attention as it is and discuss with them how to overcome those challenges and who will take what responsibility*." This collaborative conversation gave the scenario about how the participants were longing to foster students' sovereignty within the classroom lifeworld. Bimala highlighting the growth that seems from personal interest, stating:

> *I want to help the students choose some projects according to their interest of something they want to do, rather than doing any project myself, because this process will enhance pupils' ability to do good work and they will take it more seriously and move forward.*

This clearly demonstrates that students got proper direction from their mentor for everyday learning to select and make choices. Further clarifying this role of guiding students' creation and invention, Paul shared:

> *My job is to offer students with new task or project, tell them that they need to explore related problems and check whether they have understood it or not as well as ensure that they are capable of producing knowledge themselves because such work truly has a significant impact on building student ownership.*

To maintain this environment without imposing rigid obliges, Rhythm gave an explanation for an instance, "*I do not give students orders for project work, and I*

adopt flexibility in my classroom management so that such actions do not affect anyone but as project tasks are implemented, productivity comes to be ensured." But, here regarding PBL some participants presented different perspectives on students' independence and self-reliance, revealing an experiential tension between freedom and control. For instance, Bimala stated, "*To tell the truth, the fair and balanced role between me and my pupils' is a shared rule that I have established in my classroom instruction*", whereas some of the participant of the study have faith on the power of the instructor to maintain structure. For instance, Dilli Ram mentioned his living experience of managing content related to PBL, saying:

> *It is the responsibility of the instructor to keep the class under their control and have full command over the pupils, And at the same time if instructors do not maintain regular contact with the pupils, they will lose the purpose of being in the class*.

These varying reflections show that some participant thoughts and views on the use or application of PBL varied in perception of the importance of teacher and students' independence.

Strengthening Cooperation

The participants in the study thought that teachers working together would give them freedom and chance to experiment with extra concepts and share ideas with peers. They clarified that students would have the chance to share thought and viewpoints through autonomous cooperation, which has a beneficial effect on the method of PBL integration. For instance, Rhythm stated with this collaborative space, noting, "*It is good to have collaborative among subordinates for the purpose of practicing projects in order to accelerate pupils' studies but unfortunately it's not going on.*" In addition, Bimala explained the value of preparatory dialogue, sharing, "*Peer discussions and switching thought each other is good to go before implementing PBL in the classroom."* Through these insights, the participant accepted that co-creation of knowledge and collaborative interventions was allowed to increase the benefit to foster students' study methods and the techniques they adapted and apply to PBL process.

Despite recognizing its value, the teachers participating in the discussion admitted that they had not worked well with each other, which indicates the lack of teamwork in their immediate instructional experience. Each teacher wanted to work together closely with their colleagues so that shared learning environments and

outcomes could be achieved. Paul reflected on both the promise and the friction of this ideal, saying,

> *The mentioned collective mindset allows mentor-teachers to discuss with pupils, about projects, raised issues and exchange their own experiences which promotes awareness for quality learning. This is truly stimulating but here it has been felt challenging to create inclusivity and continuity in the learning of the project work.*

Through this shared reality, participants in the discussion realized that founding interrelationships within teachers was important and fundamental to achieving additional cohesion and coordination.

According to the participants in discussion, the teamwork between mentor-teacher and staff remains a key element to support and assist student cooperation by allocating and executing projects at a high level with various sections. For instance, Rhythm described the lived experience of teamwork, mentioning:

> *I believe that students want to work together on certain projects, whereby working together this way they can view any problems from the perspective of horizontal viewpoint rather than a vertical one, though it can be both sometime as a balance. This is the main goal of education where students understand that hands-on activities and practice make project work more enjoyable they achievable.*

Rhythm viewed this teamwork as a central component that could help students in connecting their PBL themes to different contents beyond multidisciplinary to provide a complete takeaway and facilitate their studying.

On the other hand, a few participants trusted and thought that the function of organogram and staff or subordinates' portfolio in the foundation which does not foster teamwork and co-creation of knowledge within teams when time permits to exchange insights to promote PBL education. As Paul shared, "*the function of organogram creates the problematic situation for teamwork*", which gave the glimpse of participants struggle regarding teamwork because organizational mindset. Similarly, Paul points toward broader systemic fragmentation, stating, "*The designed curriculum and contents which schools offer all over the country did not link each other anymore.*" Concurrently, Dinesh mentioned the lack of practical cross-departmental tasks, noting, "*No, we don't have any experience to have the inter-sectional PBL tasks.*"

However, till the date, most of the instructors trusted that the co-creation of knowledge and a shared culture show the way and foster the skill to support students along with novice ideas within new projects tasks. As Radha highlighting the active preparation, telling, "*Several workshop and training sessions are executed in order to prepare pupils future ready which will assist to selecting project themes to achieve an agreeable educational objective.*" Similarly, Paul further put his experiential vision, mentioning, "*I as an instructor experience about the framework which I want to go with shared mental model in which all dialogue for pupils and project and problems and come to the common ground for promoting subjective reality.*" In the end, the teacher participant in the study described that better teamwork between teachers within and out interdepartmentally enhance students' academic results by exchanging individual perspectives and viewpoints which could greatly benefit academic transformation.

Depending on Self-esteem of Teachers

In my study, participants' perception of their participation in PBL was driven by their thought and capability to handle the duties and problems associated with their line of work. I selected the word 'self-esteem' for this issue because it refers to how teachers perceive their ideas, behaviors and feelings in particular situations. Within this phenomenological framework, self-esteem exhibits the personal capability to demonstrate projects-tasks in a very useful and successful way (Bandura, 2010; Pyszczynski et al., 2004).

During the study, the participating teachers trusted that the living application of projects depends on the teacher's personal involvement in living world and individual persona. They demonstrated that these traits are reflected in a significant factor in classroom management and the way PBL is applied. This highlights the involved teachers' perspective and perceptions of their 'self-esteem' which is consistently linked to study process and comes under the insights of their capacity to inspire students' lifeworld of classroom engagement.

The participants trusted that individual position regarding the responsibility within PBL transfer on how they used this method. Paul reflected the value of lived experience, mentioning, "*I identified that my project related intervention was regarded as positive though it shouldn't just be about checking the container but should pave the way by being related to something to gain new insights*." Dinesh explained drawing on deep pedagogical memory, adding,

Every time when I involved in instruction, I have felt that gave me privilege of reserving extended knowledge, nearly one and half decade, therefore that gives me lots of memories and skills with which I could draw on to reinforce ideas and knowledge.

The participants trusted that they are well known and planned while applying the PBL as a motivational tool for students in the class, depending on personal lived experiences of applying PBL tasks, this process provided teachers the ample of possible alternative to foster students' knowledge.

Furthermore, the participants hinged on self-morality, ethical righteousness and compassion and kindness for students, able to share their lived experiences of pedagogical transformation of action. Some of them emphasized establishing an intimate and empathetic attachment to the students in the school-campus, inside the classroom, and that profoundly influenced the way they implemented PBL. For instance, Bimala noted the critical weight of student perception, stating, "*Whether your pupils are unhappy with your instructional style, you are definitely finished.*" Paul declared the necessity of deep relational presence, noting, "*Staying alongside the pupils with having close consideration about what they are worried about is extremely essential*."

Even though a few participants thought that in order to avoid monotony and frustration in classroom instruction the teacher required to spend time getting proximity with the students and pay attention to their opinions and experiences. They did this in order to develop sharing culture and space for creativity as well as healthy competition with productive interactions that projected PBL positivity and effectiveness in daily instruction and permitted to exercise greater impact over daily study of the students. For instance, highlighting this humanistic element of classroom lifeworld, Dilli Ram clarified, "*Teacher needs to possess an innate sense of humor or comedy and occasionally crack jocks to grasp students focus on classroom; I have this attribute. Students enjoy and please with it*", similarly Radha added importance of learning experience, stating, "*Students in the classroom and beyond remain motivated and hone for transformation only because of teacher-mentor behavior towards the content they deliver and self-esteem of the instructor*." The study findings highlighted that the participants considered that their adoption and implementation concerning the PBL strategy had been affected by their current state of self-esteem.

Students are at the center of PBL, and their participation is most needed. Participants in my study have also used varieties of ways to encourage their students to learn. They have used freedom to schools' courses, cooperation and attitude towards the activities and the students learning. This experiential autonomy is vital to the project lifeworld. According to Rofieq et al. (2019), in the PBL experience, students get opportunities to work on their own ideas. This clearly shows that freedom to work on their own project helps students to participate in the PBL.

Chapter Synopsis

In the various sections of this chapter provide an overview of the advantages and disadvantages and procedures of employing PBL to boost students' motivation to learn, acknowledging the significance of diverse teaching and learning strategies employed by teachers. Within this interpretive realm, numerous insights were gained from the discussions and interviews when considering the teachers' job experiences and PBL usage. The teachers discussed the process and which kinds of time appropriate PBL might need to be produced to increase pupils' motivation to acquire knowledge in the context of their current setting. According to teachers' views, beliefs and assumptions, the teachers who took part in the study generally utilized PBL based on their experiences of how successful teaching might be accomplished. In addition, the participants in this study had a positive assessment and opinion of PBL, demonstrating its value, effects and benefits in fostering students' abilities, skills, inspiring and encouraging to innovation, improving and increasing their teamwork and co-creation. Moving beyond abstract theories, the participants in this study focused and engaged on linking and integrating their tasks and projects to current contemporary regional indigenous challenges and problems in Nepal and addressing cultural variables while using and applying the PBL approaches.

It seems noticeable that all participating teachers acknowledged the positive aspects of PBL instructional strategy, especially regarding students' motivation and participation throughout the coursework and educational endeavors. Reflecting the deeply relational nature of the classroom lifeworld, the participants were focusing on fostering positive relationships and conversation with their students and acknowledged that they themselves had to be inspired to inspire the students in the classroom and beyond. Within this horizon of shared empathy, the participants were recognized that students who were having cognitive disabilities or learning difficulties must be integrated as dedicated learners to guarantee their inspiration and

engagement. Additionally, the participants trusted that to accomplish the intended educational result it is essential to motivate and scaffold the learning of students by using specific strategies beforehand to their PBL tasks implementation.

The phenomenological tension between freedom and structure also emerged in the participants' account, as participants differed their opinions on comprehension about the importance of teacher-student, which means teacher and student individuality sovereign in terms of PBL approach of instruction. But the participants emphasized the significance of teamwork, peer work and co-creation for the successful and sustainable application of PBL strategy for students' motivation. Finally, the participants stated that the expertise of instruction and everyday interaction and connection with their students within the classroom and beyond fostered the important pathway for PBL implementation. In such cases it was clearly demonstrated that teacher's lived experiences played an essential part in the way PBL was employed.

CHAPTER V
DISCUSSION

Chapter Overview

This chapter discusses and interprets the findings study in relation to the literature in chapter II and the Experiential Learning Theory that informed in the study. The discussion is grounded in the participants' accounts of their lived experiences of PBL in selected secondary schools in Kathmandu Metropolitan City. Rather than treating PBL as a uniform instructional intervention or assuming a direct causal relationship between PBL and student outcomes, the discussion considers how teachers experience, interpreted, adapted and made meaning of PBL within their classroom and school context. The discussion also considers the contextual nature of PBL implementation. The participants accounts suggest that the enactment of PBL was shaped by the relationship between curricular expectations, students learning needs, teachers' practices, school conditions and the local cultural environment. This perspective is consistent with the study's hermeneutic phenomenological orientation which understanding experience as situated within professional, social, cultural and institutional contexts.

The chapter therefore moves from the meanings identified in the participants experiences to their broader interpretation in relation to existing literature and experiential learning theory. Attention is given to how teachers understood learning through experience, practical engagement, reflection, collaboration and application and how these processes informed their implementation of PBL. The chapter concludes by bringing the major interpretive insights together and identifying their implications for PBL practice, teacher development and educational contexts.

Discussion of the Findings

The findings of the study provide an interpretive understanding of how teachers experienced and made meaning of PBL within their everyday classroom practices. The discussion doesn't treat the identified themes as isolated instructional techniques. Instead, the themes are understood as interconnected dimensions of teachers experiences of implementing and managing PBL. It suggests that teachers experienced PBL as requiring active pedagogical decision making. Their accounts showed that implementing PBL involved aligning projects with learning goals,

selecting meaningful and authentic problems, organizing collaborative learning, preparing students for project work, providing guidance and feedback, responding to diverse learning needs and negotiating the degree of freedom given to students. Teachers also interpreted students' participation, interest, motivation and engagement through their interactions with project tasks and peers.

These findings are consistent with the broader literature reviewed in Chapter II, with presents PBL as an approach that organizes learning around meaningful projects, inquiry, collaboration, problem solving and application. At the same time the findings expend this understanding by showing how these features were interpreted and enacted by teachers within their school contexts. Thus, the discussion focuses not only on what PBL is expected to involve but also on what its implementation means to the teachers who experienced it in practice. The following sections discuss these meanings in relation to existing literature and the theoretical orientation of the study.

PBL as Powerful, Authentic and Collaborative Approach

The findings indicate that the teachers understood effective PBL as requiring deliberate attention to its essential design elements. In these accounts, projects were not treated simply as additional classroom activities but were designed in relation to the learning objectives and the course being facilitated. The teachers' descriptions suggest that curriculum alignment provided a powerful foundation for PBL implementation, enabling project activities to support the intended learning outcomes rather than becoming disconnected from regular classroom learning. This understanding is consistent with the view that PBL involves sustained inquires teachers to connect project activities with curricular process (Krajcik et al., 2008; Krajcik & Blumenfeld, 2006; Parker et al., 2013; Thomas, 2000; Zhang & Ma, 2023).

The findings further show that authenticity was an important design consideration in the teacher's implementation of PBL. The teachers described projects as being connected with real, reasonable and contemporary issues so that students could relate classroom learning to situations beyond the four walls of the classroom. Such an approach created opportunities for students to explore issues, apply knowledge and consider possible responses to real life difficulties. The teachers' understanding therefore reflects the view that authentic learning situations can make project work more meaningful by connecting academic learning with practical and contextual experiences (Barrows & Tamblyn, 1980; Dewey, 2008; Gülbahar & Tinmaz, 2006).

Collaboration was another important element identified in the teachers' accounts. The original discussion indicates that teachers used activities such as think-write-pair-share (TWPS), teamwork and co-creation to encourage students to work with peers. Attention was also given to group size, students' capabilities, responsibilities and agreement among group members. Small-group activities and peer work were considered useful for creating opportunities for students to exchange ideas and contribute to a common task. These practices correspond with the collaborative and social dimensions of PBL discussed in the literature (Dolmans et al., 2005; Larison, 2022; Reeve & Lee, 2014; Savery, 2006; Wood, 2003).

The findings also suggest that teachers attempted to organize collaboration in a structured manner. Students were grouped according to their capabilities or academic performance and teachers outlined roles, duties and deadlines for project activities. The use of interesting materials and attention to peer relationships were also part of this process. Thus, collaboration in the teachers' experiences wasn't understood simply placing students into groups, rather it required organization, monitoring and attention to the social and learning needs of group members. This finding reinforces the importance of teacher planning in creating productive collaborative learning environments.

Taking together these findings indicate that teachers experienced PBL as a purposeful, authentic and collaborative form of learning. Curriculum alignment gave projects direction, authenticity connected learning with meaningful situations and collaboration created opportunities for students to work with others. These elements were interrelated rather than isolated features of PBL implementation. The teachers' experiences suggest that the effectiveness of project work depended partly on how thoughtfully these elements were brought together within the classroom context.

Students Understanding and Readiness in PBL

The findings indicate that teachers considered students understanding of PBL expectations to be an important condition for successful implementation. The original accounts emphasized that students needed to comprehend what the project involved, what was expected from them and how their learning activities related to the intended learning outcomes. Teachers viewed such understanding as a foundation for meaningful participation because students could engage more purposefully when they understood the requirements and direction of the project. The teachers' emphasis on comprehension also suggests that PBL can't necessarily be introduced by simply

assigning a project to students. Learners require sufficient orientation regarding the purpose, process, expectations and criteria of the project. The original discussion associates this understanding with the broader PBL literature which emphasizes clear learning goals, inquiry, project requirements and student involvement (Giri, 2016; Krajcik et al., 2008; Krajcik & Blumenfeld, 2006; Larmer et al., 2015; Parker et al., 2013; Thomas, 2000).

The findings further suggest that teachers paid attention to students prior understanding and preparedness before or during PBL activities. This was particularly relevant when students were required to apply previously learned knowledge to new or practical situations. Rather than if all students would immediately understand how to work within a PBL environment, teachers described the need to provide appropriate preparation and guidance. Therefore, students' readiness in PBL may be understood not only in terms of processing prior academic knowledge but also in terms of understanding how to participate in project-based activities. From the teachers lived experiences, readiness involved knowing the purpose of the project, understanding expectations, drawing on previous learning and becoming prepared to undertake inquiry and collaborative work. This interpretation helps explain why preparation and clarification were closely connected with the teachers' subsequent facilitation and scaffolding practices.

Student Participation, Motivation and Engagement

The findings show that all the teacher participants declared that their perception towards the application of PBL has been grounded by their great conviction and verdict towards these strategies as well as what kinds of benefits it offered for the context of education. The results of the intervention highlighted the directions in which teacher participants identified the positive aspects of PBL which represent self-opinion regarding the way this form of instruction fosters pupils' academic performance or development in contrast to conventional schooling. The teacher participants concentrated upon the beneficial aspects of PBL and had been enthusiastic about how it improved pupils' abilities, encouraged teamwork and boosted their desire to succeed. The result pointed out that teacher participants thoughts about the PBL strengthened pupils' verbal communication skills and abilities because it may allow them to engage in team or classmates and this kind of engagement fostered their interpersonal presence in the learning environment. In addition, the results spread that participant teachers inspired their learners to operate

and cooperate within teamwork since they were convinced that by participating in teamwork, learners might identify the proper solution for contemporary problems by rigorous exchanging ideas and perspectives which would improve their academic performance. The result aligns with the discoveries of several academicians who correlated with the advantages of using the PBL instructional strategies for raising learners' enthusiasm, strengthening teamwork and cultivating the ability of learners (Chiang & Lee, 2016; Goshu & Ridwan, 2024; Komara et al., 2023; Sharma, 2023).

There has been an agreement between the teacher participants regarding the effectiveness of PBL which helps pupils to become more enthusiasts and motivated and participate in their academic activities. The result authenticated an investigation done by Blumenfeld et al. (1991) in which it showed that the favorable influence of PBL for enhancing and boosting the ability of information recall and to remember.

The participants in this investigation explained in what manner PBL has been implemented to encourage pupils to do academic activities. According to the existing inquire findings teacher participants emphasized the significance of facilitating interactions in between classmates, guaranteeing and keeping teachers inspired for the purpose to develop grade to growth mindset, making accommodations for pupils who have learning difficulties to foster inclusive learning environment and instructional bridging/scaffolding among the primary strategies that utilized specifically to increase pupils' inspiration towards educational achievement. The detailed elaboration of every implication given into the paragraph hereinafter. The results of the current study and examine highlighted teacher participants thought that cultivating an interaction within the pupils in the classroom encourages and reinforces their inspiration to academic innovation and contributed a significant part in guaranteeing their involvement and participation within a PBL applied classroom.

The participants rationalized that teacher mentors' essential interaction ensured inspiration to their pupils and made them involved in academic activities and such kinds of intervention perceived by pupils' engagement, enthusiasm and desire in completing their regular assignments. The outcome declared the analytical and essential enacted by interaction for the purpose of inculcating pupils' inspiration as well as innovative practice in academia and sharing information for social benefit. In this current research project, there has been an agreement within the teacher participants generally disclosed about the value of pupils' inspiration raised as an outcome of perfect interaction. In addition, research conclusion revealed that teacher

mentors gave ongoing constructive comments to their pupils for the purpose of project tasks execution to maintain their pupil's inspiration for learning. Students, along with regular comments, suggestions and active participation increase their desire and interest towards regular classroom performance. On the other hand, providing positive comments on pupils' daily action shouldn't concentrate solely on fostering spaces of growth but also recognizing the value of the continuous procedure regarding getting and fulfilling students' objectives of learning. For the purpose to guarantying such excellent comprehension it is very important to identify and evaluating particular types of comments received by pupils and how much it promotes and permitted the learners advancement of real-time objectives and favorable accomplishment through project tasks (Catt et al., 2007; Duta et al., 2015; Doyle & Zakrajsek, 2023; Pebruanto et al., 2018; Pekrun, 2014).

Across these accounts' participation, motivation and engagement appear as closely connected dimensions of student's responses to PBL rather than as separate outcomes. When students were given opportunities to work collaboratively communicate, address meaningful problems and receive feedback teachers perceived grater involvement in learning activities. Importantly these are teachers' perceptions of student's responses to PBL the findings should therefore not be presented as an independent measure causal effect of PBL on student motivation and engagement.

Teacher Facilitation and Scaffolding

The findings of the current study and examine highlighted teacher participants thought that cultivating an interaction within the pupils in the classroom encourages and reinforces their inspiration to academic innovation and contributed a significant part in guaranteeing their involvement and participation within a PBL applied classroom. The participants rationalized that teacher mentors' essential interaction ensured inspiration to their pupils and made them involved in academic activities and such kinds of intervention perceived by pupils' engagement, enthusiasm and desire in completing their regular assignments. In this current research project, there has been an agreement within the teacher participants generally disclosed about the value of pupils' inspiration raised as an outcome of perfect interaction. In addition, research conclusion revealed that teacher mentors gave ongoing constructive comments to their pupils for the purpose of project tasks execution to maintain their pupil's inspiration for learning. Students, along with regular comments, suggestions and active participation, increase their desire and interest towards regular classroom

performance. Students' daily action shouldn't concentrate solely on fostering spaces of growth but also recognizing the value of the continuous procedure regarding getting and fulfilling students' objectives of learning. For the purpose to guarantying such excellent comprehension it is very important to identify and evaluate types of comments received by pupils and how much it promotes and permitted the learners advancement of real-time objectives and favorable accomplishment through project tasks (Catt et al., 2007; Duta et al., 2015; Doyle & Zakrajsek, 2023; Pebruanto et al., 2018; Pekrun, 2014).

The results of the study underlined that teacher participants go behind some specific procedure prior to project implementation for the purpose of bridging the pupils study performance and guarantee that students had inculcated the fundamentals needed for the deployment of PBL. Such kinds of procedures as described by the teacher participants were going to enable pupils to complete project assignments efficiently and guarantee their preparedness, so the teachers participant described that they evaluate pupils' abilities and assessed their analytical thinking and decision making skills by providing real life issues and make them involved into the execution of projects as well as develop some master plan for lab-based design to determine the domains of robustness and fragilities for enhancement. Grant (2002) and Goshu and Ridwan (2024) described that the instructional bridging or scaffold for study procedures in PBL is required, and this is very crucial mainly for pupils' capacity building approach and child friendly pedagogical atmosphere. The outcomes linked with an analysis by Kolodner et al. (2003) that elaborated the prior-project exercises offer pupils a particular type of desirable activities which could be essential on their task presentation in the future. Teacher participants highlighted that the opportunity of preparedness beforehand the application of project-tasks which aims to introduce pupils to key phrases and information which they might need before starting project-tasks. In addition, the outcomes of the study show that teacher participants clarified that information exchange needs to be based on existing data so that pupils may draw links between preexisting comprehension and real-world situations and scenarios The outcomes linked with an analysis by Stefanou et al. (2013) and it described that pupils transform themselves into well academic achievers and co create the information whenever they get the opportunities to link and interact to their prior learning or experiences.

Additionally, the teacher participants described creating instructional scaffolding incorporating support pupils giving right kinds of assistance to complete their assign tasks. Based on an inspirational standpoint, teacher participants assisted pupils by efficiently running their educational environment (Kiefer et al., 2014). Within this present research, teacher participants controlled their educational environment through assisting and encouraged 83 pupils' studying during the project responsibilities application for the purpose of tackling the concepts that they might encounter. Whenever pupils become aware of their teacher mentor being encouraging, they'll have the ability to disclose significant amounts of inspiration and accomplishment (Ryan & Patrick, 2001). These results are consistent with earlier studies that scaffold and instructional bridging serve as a crucial component of successful mentoring strategies offered for the pupils within PBL. Singer et al. (2000) and Taber (2018) described that the model of PBL could ascertain how the instructional bridging or scaffold should be deployed by mentors' and whether it gradually grows dim as time passes. Whenever reexamining the psychosocial postmodern paradigm and how it connects to the outcome (Gergen, 2001). This segment demonstrated the main and foremost performance of the instructor in everyday work as they took on the responsibility of instructors and coaches and that is positioning within the psychosocial postmodern conceptual paradigm which needs instructor to be design a memorable and excited study platform with the pupils around the learning space and assist them by the uses of this real-life involvement for the purpose to co-creation of expertise and information (Grant, 2002; Karin et al., 2007; Krajcik & Shin, 2014).

The teachers experience therefore position facilitation and scaffolding as complementary aspects of PBL implementation. Facilitation created opportunities for interaction and participation whereas scaffolding provided the temporary support necessary for students to engage in tasks that might otherwise have been difficult to manage independently. This finding highlights that teacher involvement rather it requires teachers to adapt the form and degree of support according to student's needs.

Responding to Diverse Learning Needs

The findings of the study demonstrated that teacher participants made accommodation for their pupils who have difficulties with learning to increase their inspiration. The outcomes of the study indicated that teacher participants concentrated

on incorporating all the pupils who have challenges and struggles with learning in PBL to take part and enhance their academic achievements of them. The pupils with learning difficulties have been offered additional accountabilities as well as providing greater considerations to monitor the learning transformation. In addition, teacher participants described that pupils with learning difficulties have been incorporated within the teamwork. The present inquiry authenticates the literature that pupils with learning difficulties could be cared for and accommodated within the collegial and co-creative learning environments which allow them a fewer constricted learning atmosphere in comparison with the teachers who apply conventional instructional methods (Belland et al., 2009; Filippatou & Kaldi, 2010; Thapaliya, 2023; Wertz & Mulcahy, 2025).

The participants stayed conscious about the difficulties that pupils with learning difficulties or impairments encountered, and they hone to lend their hands to assist their increment of understanding and abilities for the purpose of guaranteeing classroom participation. Nevertheless, the results indicated that teacher participants required additional sensible modifications for individual pupils in addition to teamwork. As reported by Asghar et al. (2017), pupils with learning difficulties engage in conflict on the time for participating in PBL events and actions, as well as teamwork. In this case pupils having learning difficulties or impairments frequently went through different hard times in societal interpersonal collaboration and communal abilities shortfalls (Kavale & Forness, 1996; Toker & Eser, 2025).

Responding to diverse learning needs was therefore part of the teachers' practical experience of making PBL workable in the classroom. The findings support that teachers had to balance common project goals with differentiated forms of support. This is particularly relevant to PBL because students may enter a project with different levels of prior knowledge, confidence, ability and readiness for independent work. The teachers accounts show that inclusion required active teacher attention rather than if all students would participate in the same way.

Negotiating Student Agency and Teacher Guidance

The outcome of the study disclosed that not everybody who took part in instruction had an obvious comprehension of the consequences of pupils' freedom within the PBL. Many of the attendees of the study explained freedom to give pupils a sense of belonging for them to be given the chance to choose the subjects of their projects. Teachers need to design a structure or outline and allow pupils to figure out

the best way to frame their individual project assignments. Further the study findings show that developing a bunch of alternatives effort and opportunities to students as a component of the instructor guideline for the classroom could assist them to meet their demand for self-determination and can prepare the project assignment aiming extra powerful and meaningful.

In addition, the teachers' accounts should guarantee a great degree of student's freedom whenever assign project issues for them under certain parameters. While concerning the outcomes in this segment within the paradigm of social functionalism context. It was observed that social functionalism should be accomplished within exercise throughout the transformation of the functions of the instructor and the mentee to enhance their studies. Nevertheless, the participants considered that implication of PBL had not substantially influenced the degree of mentor-teachers' freedom and this might influence the result of the strategies used and the essential element in transforming learners' inspiration. The results stretch to the research of this describe that there is also a knowledge void with respect to comprehending freedom within the wider body of academic research study (English & Kitsantas, 2013; García Martín & Pérez Martínez, 2017; Katz & Assor, 2007; Keltner et al., 2013;; León et al., 2015; Ryan & Deci, 2000;).

Thus, the teachers lived experiences reveal an ongoing negotiation between student agency and teacher guidance. Too little structure could make project work difficult to manage whereas excessive teacher control could reduce opportunities for students to exercise choice and ownership. PBL implementation therefore required teachers to determine when to guide, when to support and when to allow students greater responsibility. The finding is consistent with the broader understanding of PBL as student-centered while still requiring purposeful teacher design and facilitation.

Teacher Collaboration and Institutional Context

The study outcomes showed teacher participants' opinions about collaboration within their educational organizations. Teamwork may be described as assignment-allied collaborative activity between coworkers (Kelchtermans, 2006), it symbolized various events that could be identified corresponding to their degree of complexity (Vangrieken et al., 2015). The greatest degree of dependency is demonstrated by the various ways in which teacher-instructors cooperate, including helping one another and sharing collaborative work. The teacher participants felt that improving their

cooperation with one another would help with the preparation of the mission of tasks and ensuring the incorporation of various project related issues. Yet teacher participants described the way they encountered many kinds of disputes and argued about cooperation within the other members of the faculty because of the infrastructure setting and institutional culture and climate of the school campus. The teacher participants explained that their present organizational framework does not have coherence and consistency among the feasible instructional offered lesson programs which caused the absence of cooperation within the teacher-instructors. Even so, teacher participants continue to support teamwork within the coworkers as a means of enhancing pupils' acquisition of PBL. The literature identifies teacher cooperation and organizational support as relevant to educational innovation (Chovriy et al., 2024; Horn et al., 2017; Kezar & Holcombe, 2017; Kezar & Lester, 2011; Patton & Parker, 2017; Tamim & Grant, 2013)

The teachers' accounts also indicate that collaboration within the academicians fosters a system for communication, growth and advancement. In addition, the teacher participants recognized that cooperation is a fundamental principle inside the organization. Teacher participants described that across the cooperation, they may give and discuss the ideas and perspectives and insights of other instructors' understanding for the betterment of pupils by the application of teamwork. These results are consistent with research by Kosnik et al. (2015), which identified that teacher-mentors laborious effort and coordination in a correlative mode could enhance instruction for the reason their conversations encourage and influence the action of other team workers. One additional research described that teamwork gives instructors a chance of novice strategies of educating wherewith teachers able to interchange expertness and demonstrate on to the improvement of instructional abilities and eventually the excellence of their teaching and mentoring. Thoonen et al. (2011) explained that educators pour out their feelings in a cooperative mode which can mirror emphatically on the fundamental elements of the well-executed studying organization. In consequence shared action within the instructors generates a culture of teamwork among the educational institutions to maintain its progression and expansion. Whenever the teacher-mentor adopted shared vision and mission, collaborating on planning and such kinds of actions on exchanged thought and views help to develop a habit of foremost concern.

Teamwork gives the best chance for the development of innovative ways issue resolution and raises enhances effectiveness of programs and projects and assistance via encouraging correlative labor and enhancing novice strategies and responses to institutional issues that would provide hints towards growth and expansion of curricula. The result gives an addition towards the examination and proves the outcomes of the research intervention accomplished the value of subordinate's teamwork and cooperation because it significantly enhances the way students learn and achieve as well as fosters the learner's knowledge acquisition. Likewise, the outcomes parallel towards the research done by Cho and Sriram (2016), and this basically highlighted the teamwork as a skill to increase the efficacy and effectiveness of school level academic achievement and give an addition towards the research article crafting through reaffirming the importance of teamwork in further educational establishments.

Teacher collaboration can consequently be understood as an institutional condition that supports PBL implementation. When teachers share responsibilities, ideas and practical solutions, project work may become more manageable. On the other hand, limited cooperation may increase the burden on individual teachers. This finding reinforces the need to interpret teachers lived experiences of PBL within the wider school environment rather than viewing implementation as an individual classroom decision alone.

Teacher Confidence, Professional Disposition and Adaptation

The teachers who participated in information collection for my inquiry explained that their inspirational activities have been well connected regarding the way pupils considered the academic collaboration within the PBL implementation. The conclusion represented that teacher participants trusted that their self-inspiration corroborated the stimulation of their learners inside and beyond the classroom. The application, for instance offering difficult assignments to pupils inside the classroom incorporating the importance of everyday experiences and encouraging them to engage in certain prescribed activities that are connected to teacher mentors' passion and enthusiasm. The teacher-mentors' self-inspiration is important or keyway to enthusiasm by improving the classroom efficiently and delivering an excellent as well as outstanding education. The results of the study indicated that teacher-mentor instructional performance was enhanced whenever they were inspired and involved in the conduction of teaching and mentoring activities which may have an impact into

the standard of teaching within the teaching space. The study findings indicate that when teacher participants are genuinely inspired and participated in searching and transforming their teaching practices improvement process which naturally boosts the quality of classroom teaching and mentoring. The discussion connects and points out that a crucial limitation: despite this engagement teacher participants often lack a methodical consideration to acquiring productive academic results. The study findings delivered the understandings within the significance of participant teachers' inspiration in inspiring learners and participating them while running the tasks of PBL (Lam et al., 2009; Ramos-Ramos & Botella Nicolás, 2022; Thoonen et al., 2011; Michaelsen & Sweet, 2011; Ushioda & Dörnyei, 2021; Han & Yin, 2016; Klassen & Chiu, 2010; Uysal, 2023).

Similarly, the participants had been focused within the study which denoted that the advantages pupils get from PBL would be the turning point for the mentors' inspiration for its effective application. Accordingly, if the teacher-mentor autonomously develops a powerful inspiration for investing into their place in which teaching and mentoring occur, which will be mirrored in the modification of their application in particular learning space. The original discussion emphasized the two distinct components of instructor inspiration: the inspiration to instruct the pupils and the inspiration to sustain in the job market. The inspired instructors expressed excitement regarding their teaching and mentoring methods and activities inside the classroom where they teach. It seems that pleasantly in the research study teacher-mentors inspiration has been explored mainly in connection with confidence in theirs' own abilities (Phyak et al., 2024; Shah & Bhattarai, 2023), however it was fewer times concerned on the internal inspiration (Rajbhandari, 2017; Roth & Weinstock, 2013). Within this intervention, teacher participants emphasized their own internal drive and the value of self-esteem and differentiating the instructional techniques to prevent boredom. It's especially difficult to fully comprehend because the teacher participants were acting as exemplars for their pupils and motivated as well as encouraged them to acquire mindsets and convictions.

The results of the study also disclosed that teacher participants depend on their own expertise or skills for the purpose of utilizing PBL effectively. Teacher participants elucidated that their prior learning, individual traits and rapport with pupils guaranteed the effective execution of this method of instruction. In different research articles, instructors prior leaning illustrated their performance, their behavior

in regular classroom instruction and the methods of modeling and planning of teaching and how they engage and make rapport among those they teach in the classroom. The study contributors' prior learning elucidates instructors' self-esteem as it might mirrors or indicates mentors' opinions concerning their capacity to support pupils achieve the expected objectives of academic activities The outcomes are following an expectation with the study which described that teacher-instructors' self-esteem helped or influenced them to become fully committed to achieving a goal of using the postmodern strategies of classroom teaching. The study pointed out that instructors would deal with the useful teaching-mentoring to their scholars based on self-instructional expertise and it is derived from their prior learning experiences.

An additional investigation illustrated that whenever schoolteachers' figure-out their prior-learning soon became instructional flourishing, where their self-esteem could make greater in size. Within the PBL, instructors' self-esteem or intrinsic motivation influences how they behave or react towards the shifts and modifications of the knowledge creation activities, might directly impact in what way they project daily lessons and remain conscious about the usefulness of these strategies. The outcomes enlarge the body of research articles about the effects of instructors' self-esteem within the PBL application and execution. Ultimately, instructors' application and execution within the PBL strategies for the purpose of flourishing learners' intrinsic courage eventually examine them as a crucial component in socio-cultural transformation wherever the pupils and the educators together participate in knowledge creation throughout their edupreneur framework. Together the organization's mission and the overall goal of Nepal's education policy are centered and concentrated around the learner as the primary driver for the purpose of fostering and promoting academic achievement. The outcomes of this study paper's conclusion highlighted the process of academic personal applied sociocultural artifacts for knowledge creating for the purpose of improving pupils' information acquisition and revealing their intrinsic thought process and mindset (Acosta-Gonzaga, 2023; Chen et al., 2022; Choi et al., 2019; Holzberger et al., 2013; Keller et al., 2017; Reilly et al., 2014; Woolfolk & Hoy, 1990; Nie et al., 2013).

The teachers' experiences consequently position teacher confidence and professional disposition as dynamic rather than fix characteristics. PBL required teachers to work beyond a purely transmission-oriented role and to make practical decisions as project activities unfolded. This interpretive understanding is important

because it shows that implementing PBL involved not only adopting a teaching method but also adapting one's professional role and practice to the demands of PBL.

Contextualizing PBL in the Local and Cultural Setting

The findings indicate that the utilization or application of PBL is inclined towards the local setting as well as local practice and beliefs. All teacher instructors declared that they reinforced and inspired their pupils to develop social interaction and relation through the local settings by advocating communal difficulties and worries in classroom to identify proper resolutions. The findings described that teachers' participants bring different issues concerning the local settings and argued on them seating with their pupils more likely to inclining with the cultural heritage of their lived in. In addition, teacher participants described that the schools have been paying attention to the interactions of the pupils towards local settings via introducing activities and initiatives which provides accurate image of the cultural norms and beliefs of the regions where they inhabitants. Similarly, the outcomes of this existing investigation revealed that all the teacher participants become mindful of their surroundings and well thought about social ritual factors whenever utilizing and applying PBL symbolized that the implementation of the PBL strategies have not been totally deployed into the learning zone. The members of the study talked about how applying PBL needed an in-depth comprehension of the present-day environment within the Nepali school, which could develop certain barricades for pupils whenever adapting and picking favorite project tasks and may call to justify the PBL for the purpose of learners/pupils develop their analytical and creative abilities. Becoming more sympathetic towards social rituals makes the teacher participants anxious in the same way as they emphasized and expressed with me throughout the course of the conversation. Most teacher participants detached to the indigenous practice when more than half of them belong to expats; so, they took care to remain ethnically authentic and in line with indigenous norms and values.

The outcome conforms to an inquiry in which emphasizes that remaining empathy upon other beliefs and cultures demands high personal willingness to embrace and care for diverse ethnic lifestyles that generate and lead towards a greater and deeper awareness of the interaction of different cultural backgrounds. It is noteworthy that the research has concentrated on the efficacy of the entire reformation paradigm whereby PBL is a key element. On the other hand, the study has not yet been made clear about the larger environment of PBL adoption and impact

considering the bigger picture. However, the Nepal is unique and absolute country with diverse ethnicity, culture and creed, flora and fauna and the Nepali traditions and ritual practices' foundations are mainly lay in the relations toward Hindu-Kush uniqueness within the Southeast Region sometime can identify towards the Middle East geographical area. The participants mentioned that educational system of Nepal implemented the transformative module of teaching the current stages within commonwealth considering the South Asian oneness and the authority of the Hindu-Kush cultural beliefs take place fundamental space to the longevity of administrative innovations. In addition, the national curriculum, published textbooks and instructional leaders in a school within the nations performed the important task for the purpose of enhancing and transforming its academic strategies till the date. As stated by participants, the English is proceeding the means of instruction and is becoming increasingly vital within the Universal setting and particularly its supremacy in the use of information and communication technology (ICT), artificial intelligence (AI) and informational advances. From this perspectives, owing to the fact that financial or economic expansion and shifts of the twenty-first century and internationalization, it had been demanded to investigate in human-flourishing for the purpose to assist the lifts in the Nepali education system from the conventional instructional guidelines to collegial models along with English dialectics as an instructional modality throughout colleges and university campus. It was anticipated that the changing educational phenomenon will alter the Nepali academic approaches and enhance the impact of other cultures and ways of looking at things of Nepalese scholars. Though, the Nepal has been eager to preserve national customs and believes to foster healthy and powerful patriotism. The educational institution has been stable to maintain specific policies and guidelines while regarding educational autonomy although during the specific points of time the choice of thought and facts which granted are unlimited that exposed pupils to different ideas and frame of references. A sense of balance is preferred as recognizing the ideals of multiculturalism and the fundamental principles of Nepalese culture.

The finding mentioned that Nepal having indigenous cultural heritage which prioritizes family ties and connections that decreases the impact of foreign influences. The Nepali communal believes which determined by certain ideas and practices associated with highlighting the requirements for the entire community ahead or prior of those of each person or people, it is different in comparison to the self-centered and

self-interested lifestyle that exists in the west. The cited literature discusses the importance of culture, context, locality and educational practices in shaping teaching and learning (Adhikari & Shrestha, 2024; do Nascimento et al., 2022; Gellner et al., 2012; Montuori &; Molden et al., 2017; Schimmack et al., 2005; Shahjahan et al., 2022; Torres, 2022; Zohar & Hofmann, 2012; Zharkevich, 2019)

For the teachers in this study contextualizing PBL involved relating project activities to the realities of the local community and the cultural setting of the school. This finding is particularly significant for interpreting PBL within Kathmandu Metropolitan schools because the implementation of an educational approach developed in different contexts may require adaptation to local circumstances. The teachers' experiences suggest that contextual relevance was not an additional feature of PBL but part of making project work meaningful and workable in their setting.

Integrative Discussion Through Experiential Learning Theory (ELT)

The findings suggest an experiential cycle in teacher's implementation of PBL. Thacher's engaged in practical project experiences, observed and reflected on students' responses, developed understanding about effective PBL practices and adapted or experimented with subsequent instructional practices. This cycle is particularly relevant to the life experiences examined in this study because teachers' implementation of PBL was shaped by what they encountered in their actual classrooms. Their experiences of curriculum alignment, student readiness, collaboration, scaffolding autonomy, local context and institutional cooperation were therefore not isolated issues; they were interconnected aspects of the experiential process through which teachers understood and implemented PBL.

Findings further indicate that the experiential nature of PBL was influenced by the surrounding school and classroom context. Curriculum requirements, available resources, institutional cooperation, teacher preparedness, student diversity and local cultural circumstances shaped how teachers experienced and adapted PBL. Therefore, ELT helps interpret PBL not merely as a teaching technique nut as an ongoing process through which teachers and students engage with experience, reflection, understanding and application.

Importantly this interpretation remains focused on the teachers' lives experience which were the central concern of the present study. The findings don't establish that every student independently completed all stages of the experiential learning cycle. Rather the teachers accounts show that many PBL practices they

described created opportunities for practical experience, reflection, understanding and application. In this sense ELT provides a useful interpretive lens for understanding the meaning that teachers attached to their experiences of implementing PBL in the selected Kathmandu Metropolitan schools.

Chapter Synopsis

This chapter discusses and interprets the findings of the study in relation to the research focus, relevant literature and Experiential Learning theory. The findings showed that teachers experienced PBL as a purposeful, authentic, collaborative and contextually situated approach to teaching and learning. Teachers emphasized curriculum and learning outcome alignment, students' understanding and readiness, participation, motivation, engagement, collaboration, teacher facilitation, scaffolding, student autonomy and attention to diverse learning needs.

The discussion also showed that teachers' implementation of PBL was influenced by their professional discussion, confidence, experience, collaboration with other teachers, institutional conditions and the local and cultural context. Teachers described adapting their practices according to students' needs and classroom situations rather than following a single fixed approach to PBL. Through the lens of Experiential Learning Theory, these findings were understood as an ongoing experiential process involving practical experience, reflection, development of understanding and application or adaptation. Teachers' accounts demonstrated how their experiences of implementing PBL informed their subsequent instructional decisions and practices.

The implications of the findings highlighted the importance of teacher preparation, professional learning, institutional support, collaboration, curriculum alignment, contextualized project design and opportunities for reflection. Overall, the chapter indicates that the meaning of PBL implementation un the selected Kathmandu Metropolitan schools context is closely connected with teachers ongoing experiences of facilitation, adapting, reflecting upon, and developing their classroom practices.

CHAPTER VI
REFLECTION, CONCLUSION AND IMPLICATIONS

Chapter Overview

This final chapter presents a comprehensive synthesis of the entire study by bringing together the major findings, interpretations and contributions of the study. It brings with a summary of the study, highlighting the study purpose, methodological approach and key findings related to teachers lived experiences of implementing project-based learning (PBL) in Kathmandu Metropolitan schools. Based on these findings, this chapter draws conclusions that address the study guidelines and reflect the significance of PBL in enhancing students' motivation, engagement and impactful learning. Likewise, here I discussed the theoretical, practical and policy implications of the study of teachers, school leaders, curriculum developers and educational policymakers. Furthermore, from this chapter I offered recommendations for educational practice and further study while acknowledging the limitations of the study and suggesting possible directions for interventions ahead.

Reflection

The application of PBL in this study was explored within the connection to an conceptual framework which served as an instructional manual to encourage students' enthusiasm for study and described students' motivation and engagement approaches to apply PBL and utilization of this method of instruction in learning. Findings reflected that PBL was perceived as a learner centered instructional approach that could support meaningful learning, active participation and the development of Learning experiences connected with curriculum expectations and grade level learning outcomes. Thus, the implementation of PBL was not viewed simply as the of project activities but as an instructional approach the required teachers to consider the design, purpose and context of learning activities. Generally, PBL has been observed as a successful instructional and educational strategy which acts as a promoter of constructive curriculum design and grade-level indicators on behalf of individual learners.

The teachers who participated in the information collection were well-informed regarding the vital elements of PBL, which was especially explained within the research studies. Although teacher participants employed Project based learning

with everything they have got, the study's findings revealed that teacher participants utilization and application of PBL needed an extensive comprehension about exactly how much greater they might contribute to the technique of education within the regards to inspiring and encouraging pupils' academic involvement.

It's spellbinding to note that teacher participants within this investigation were unable to express any worry about the difficulties in putting PBL into practice. That re-establishes their conviction about the part of PBL for boosting and improving the method of academic achievement. Trusting into the significance of PBL being a learners-centered strategy which appears to support teacher participants to engineer the obstacles of its execution. Although, the most significant feature has been identified within this research and that was an absence of teamwork and cooperation between the teacher participants. This absence of teamwork might have an impact on the process of disciplinary interconnection which probably supports pupils nurturing and enriching in their daily classroom studying. In addition, teacher participants confirmed to become contextually or ethnically appropriate while applying PBL and alignment of their instructional strategy towards the principles and faiths which were raised from the indigenous settings. The teacher participants were well informed about the hindrances encountered by the pupils who have cognitive impairments and the necessity of making accommodation for individuals to enhance their desire to academic activities. Furthermore, teacher participants' prior learning and character traits were identified to possess the effects of how PBL has been applied into the learning space, and it indicated the significance of instructors' self-esteem on the way of this strategic application.

In this study the three major elements of this idea framework or structural diagram demonstrated how instructors' method of application and execution stimulate pupils' inspiration. The indicated instructional strategies that revealed the outcomes, performed a part within supporting or bestowing to pupils' inspiration through designing the best educational atmosphere which prioritizes and actively encourages PBL project-tasks over the teacher-centered approaches. In addition, maintaining efficient procedures, for instance interaction or dialog among mentees and mentors which permitted pupils to sense the assistance and direction, and this should connect and increase their interest towards academic achievement. It is important to note that teachers recognized the significance of teamwork and understood that such kind of engagement should enhance their strategies and boost pupils' intrinsic inspiration

towards learning. The three major elements of this structural diagram furnish the key performance indicators to foster pupils' inspiration whenever it is correctly executed. Consequently, this is extremely important to recognize that the outcomes of the current research demonstrated the pupil's inspiration which isn't the result of a single element, relatively the collaboration amongst the three major elements of structural diagram.

Conclusion

The study explored the phenomenon of the PBL through the viewpoints and lived experiences of teachers who have employed PBL strategies for the purpose of encouraging students' inspiration, motivation and engagement in the learning process. The findings of the study indicate that teachers experienced PBL as a purposeful, authentic, collaborative and experiential approach to teaching and learning, The teachers emphasized the importance of connecting project activities with curriculum content and learning outcomes, authentic and real-life problems, students' interests, collaboration and local contexts.

Regarding the implementation of PBL the findings showed that teachers used a range of practices to design and manage project activities. These included aligning projects with learning outcomes and curriculum requirements, selecting meaningful and problem-oriented topics, organizing students into collaborative groups, considering students' readiness and understanding, providing scaffolding and feedback and allowing students opportunities to participate in selecting project themes and exploring solutions. The findings therefore suggest that PBL implementation was not experienced as a fixed procedure but as a process requiring teachers to facilitate, monitor, adapt and respond to the classroom context.

The teachers lived experiences further indicated the PBL was associated in their accounts with increased opportunities for student participant, interest, motivation and engagement. Teachers described students as becoming more involved when projects related to their interests, real-life situations, collaboration and opportunities to share ideas and findings with their peers. At the same time the findings showed that student participation and engagement required continued teacher interaction, guidance, feedback and support. Thus, the study doesn't claim the PBL automatically produces motivation or engagement rather than the teachers' experiences suggest that PBL practices may create conditions in which students can become more interested, involved, collaborative and motivated in learning. The study also revealed that the

implementation of PBL was shaped by teacher's professional experience, confidence, instructional disposition, collaboration with colleagues, institutional conditions, students diverse learning needs and the local and cultural setting. Teachers experienced the need to balance student freedom with appropriate teacher guidance and to adapt project activities according to students' abilities, interests and classroom circumstances. The findings further showed that teacher collaboration and institutional support were considered important, although participants also described limitations in teamwork and opportunities for collaborative PBL activities.

The study also has relevance to the broader educational context of Nepal, where educational development places emphasis on improving the quality of teaching and learning and encouraging approaches that involve learning more actively in the learning process. In the context the findings of the study provide an understanding of how teachers in selected Kathmandu Metropolitan school contexts experienced and implemented PBL in relation to curriculum, classroom interaction, student participation, motivation, engagement, collaboration and meaningful learning.

Overall, this investigation generates an understanding of teachers' engagement with PBL and sheds light on how these strategies were experienced and applied to create a productive learning environment in which students could participate, collaborate, explore and engage with learning activities. The PBL approach also represents a method of inclusive and experiential learning that requires teachers' dedication to achieving the intended goals and objectives of the educational program. The PBL also represents a method of inclusiveness that demands and necessitates an instructor's dedication to achieving the intended goals and objectives of the educational program. It's my expectation that through this investigation, together with its suggestions, shall start a fresh dialogue and enable greater debate about PBL instructional methods, which might assist the educational organizations in incorporating those approaches and strategies to boost and improve pupils' ability to learn and their inspiration.

Implications of the Findings

The findings of this study, review of the available literature and my evaluation and interpretation gave me new perspectives on PBL and offered several recommendations about the next level of work. These suggestions or recommendations are particularly relevant to the application of PBL at academic institutions of school education in Nepal. The study findings demonstrated that

teachers embraced and considered the PBL as an instructional and educational approach that enhanced students' learning and fostered their interest in learning.

The teachers implemented PBL strategies explicitly for the purpose of inspiring their students by fostering effective interpersonal interaction, providing instructional bridge for students' academic achievements and maintaining their own inspiration. To reap greater benefits through these strategies, I suggest enhancing teachers' facilitative approach within PBL to boost students' freedom of learning, decision making and ownership of learning contents. Teachers within PBL might encourage students' decision making to strengthen their desire and involvement in the academic activities. For instance, teachers might encourage students to offer constructive comments on their teamwork, assignments, inquiries and reflection on overall outcomes of their work. Condliffe (2017) described boosting students' freedom of thought within PBL as being linked with daily design tasks that concentrate on student's open research and analysis which are related to the structural characteristics PBL.

Apart from this, the findings of the study showed intuitional awareness of students who have learning difficulties.

To acknowledge the advantages of the method, I suggest a structured, yet cohesive PBL design that includes cultural contexts with the development of students' critical thinking skills. The main PBL strategy could reflect the circumstances of the local and indigenous context in which academic activities are situated, thereby supporting and connecting learning with the surrounding environment.

The outcome of the study may be utilized to identify areas for progression and where instructional strategies could be improved and supported to mitigate obstacles and difficulties in learning. This could have a direct effect on institutional procedures and guidelines observed by the organization to achieve its institutional objectives. The study findings showed that instructors couldn't meet the desired level of teamwork among their colleagues. Integrating teamwork among teachers in school context promotes and assists institutional objectives and missions by delivering effective teaching and learning for all students. I suggest establishing a framework for cooperation among teachers within schools to enhance and encourage innovative strategies and techniques while reducing obstacles to offering students a successful educational environment. Focusing on cooperation among teachers may provide a way to support the institutional mission and ongoing real-life education.

Along with this, the findings of this study demonstrated institutional awareness of students who have learning difficulties. In PBL applications and exercises, they were considered alongside their peers, while teachers described the need to provide appropriate attention and support according to individual needs. I suggest setting up a program for professional growth to properly prepare instructors at not only Nepali private educational institutions but also at public schools too to assist students who have unique desires and learning difficulties. Such initiatives might foster teachers' knowledge of different forms of learning impairments and appropriate instructional strategies including Universal Design of Learning and individualized approaches, enabling them to support students and expand opportunities to practice of multiple means of participation, engagement, expression and action at the same time effectiveness within PBL implementation.

The outcome of the study showed that teachers' self-esteem had a significant influence on how they applied and implemented PBL in classroom instruction. It is very crucial to note that PBL involves a shift in the foundational strategy to instruction from a lecture method towards a more student-centered methodology of learning. As a result, the development and implications of PBL have the potential to alter both the instructor's and student's perspectives (Choi et al., 2019). I suggest creating an instruction course for the teachers within the institution that would provide them with opportunities to improve their methods of education. Such an educational course could incorporate techniques to assist the application of PBL as an innovative method of teaching promote of its implementation and support teachers' acceptance of those teaching strategies. Such professional learning may help improvise teachers' feelings of self-esteem and preparedness to execute PBL successfully.

Finally, the implication of the study findings shows that effective implementation of PBL requires attention to project activities and student's agency parallelly, contextual relevance, teacher cooperation's, address for diverse learning needs and teachers' professional development continually. These implications are similarly applicable to the selected school contexts in Kathmandu Metropolitan City and may provide a foundation for truther reflection and discussion about the use of PBL in school education in Nepal.

Chapter Synopsis

The chapter synopsis provides the study on teachers lived experiences of implementing PBL in selected Kathmandu Metropolitan schools. The study explored

how teachers implemented PBL and how they experienced its contribution to students' participation, motivation and engagement in studying. Applying and interpretivist paradigm and hermeneutic phenomenological approach the study interpreted teachers lived experiences through the lens of Experiential Learning Theory. The Findings showed that teachers experienced PBL as a purposeful, authentic, collaborative and contextually relevant approach to the required curriculum alignment, readiness of student, facilitation of teachers, scaffolding, students' agency and attention to diverse learning needs. Teachers also highlighted the importance of professional confidence, collaboration, institutional support and local cultural contexts in implementing PBL. The study further indicated that teachers' experiences involved ongoing process of experience, reflection, understanding and application. Finally, the study highlights the potential of contextually responsive PBL to support meaningful participation, motivation, engagement and experiential leaning while recognizing the contextual challenges involved in its implementation.

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