CASE STUDY ON ECO-FRIENDLY PRACTICES AND TEACHERS' EXPERIENCES IN A PRESCHOOL IN KATHMANDU VALLEY

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A Dissertation

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AN ABSTRACT

of the dissertation of *Leeza Maharjan* for the degree of *Master in Sustainable Development* presented on *27 July 2025*, entitled *Case Study on Eco-friendly*

APPROVED BY

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The early childhood period is the main factor that determines the development of sustainable values and environmentally friendly habits. Nevertheless, the practice of environmental education in Nepalese preschools is very limited and not yet explored. The research intends to reveal the truth about eco-friendly practices in a preschool environment in Kathmandu Valley through the views of early childhood educators. It studied the application of eco-friendly practices in the early childhood sector and the ways that teachers include children in environmental learning activities. It also investigated the challenges faced during the implementation of eco-friendly practices.

Data is collected through in-depth interviews and classroom observations with six teachers from a Montessori preschool using a qualitative case study design. Thematic analysis is done to explore teachers' views, pedagogical approaches, and the contextual aspects that affect eco-friendly practices. The results reveal that the teachers are motivated and creative while implementing eco-friendly practices through the normal everyday activities in the classroom, which include waste separation, planting, and use of materials. Most of students are very active in these activities and display a gradual learning of environmental responsibility.

Challenges arise due to inadequate training, substandard curriculum integration, lack of infrastructure, and limited involvement of parents. The findings suggest that the key to the success of eco-friendly education is teacher training, the coordinated integration of curricula, and the establishment of family and community

partnerships. Teacher backing would imply that even minor daily activities can turn into the habit changing building blocks and hence the continuity of environmental awareness for a lifetime. It is essential to familiarize the young children with the eco-friendly learning aspect in their daily practices to make them environmentally responsible from the very beginning.

……..... 27 July 2025

Leeza Maharjan

Degree Candidate

शोध सार

विकास शिक्षामा स्नातकोत्तर उपाधिका लागि लीजा महर्जनको शोध प्रबन्धको शीर्षक “काठमाडौं उपत्यकाको एक पूर्वप्राथमिक विद्यालयमा वातावरणमैत्री अभ्यास र शिक्षकहरूको अनुभव सम्बन्धी केस अध्ययन” ११ साउन २०८२ मा प्रस्तुत गरिएको थियो ।

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उप. प्रा. सुरेश गौतम, पिएचडी

सोध निर्देशक

बाल्यावस्था नै दीगो मूल्य र वातावरणमैत्री बानी विकास गर्ने मुख्य आधार हो। तर पनि, नेपालका प्रि-स्कूलहरूमा वातावरणीय शिक्षाको अभ्यास निकै सीमित छन् र यसबारे पर्याप्त अनुसन्धान भएको छैन। यस अनुसन्धानले काठमाडौं उपत्यकास्थित एक प्रि-स्कूलमा वातावरणमैत्री क्रियाकलापबारे प्रारम्भिक बालशिक्षकहरूको दृष्टिकोणमार्फत वास्तविकता उजागर गर्ने उद्देश्य राख्दछ। यसले प्रारम्भिक बाल शिक्षामा अपनाइएका वातावरणमैत्री अभ्यासहरू र शिक्षकहरूले बालबालिकालाई वातावरणीय सिकाइका क्रियाकलापमा कसरी संलग्न गराएका छन् भन्ने पक्ष अध्ययन गर्दछ। साथै, यस्ता अभ्यासहरूमा विद्यार्थीहरुलाई संलग्न गर्दा शिक्षकहरूले सामना गर्ने चुनौतीहरू पनि पहिचान गरेको छ।यो अनुसन्धान गुणात्मक अध्ययनमा आधारित छ, जसमा एक मन्टेश्वोरी प्रि-स्कूलका छ जना शिक्षकहरूसँग अन्तर्वार्ता र कक्षाकोठा अवलोकनमार्फत तथ्याङ्क संकलन गरिएको छ। शिक्षकहरूको दृष्टिकोण, र वातावरणमैत्री अभ्यासमा प्रभाव पार्ने सन्दर्भगत पक्षहरूलाई बुझ्नका लागि विषयगत विश्लेषण प्रयोग गरिएको छ।

शिक्षकहरू विद्यार्थीहरुलाई वातावरणमैत्री अभ्यासहरूमा संलग्न गर्न प्रेरित र सिर्जनशील रहेका छन्।उहाहरूले नियमित कक्षाकोठाका गतिविधिहरू जस्तै फोहर छुट्याउने, बोट बिरुवा रोप्ने, र पुनःप्रयोग गर्न मिल्ने सामग्रीको प्रयोग गर्ने जस्ता अभ्यासहरू समावेश गर्नुभएका छन्। अधिकांश विद्यार्थीहरू यी क्रियाकलापमा सक्रिय सहभागिता जनाउँछन् र वातावरणीय जिम्मेवारीबारे सचेत बन्न थालेका छन्।तर पनि, अपर्याप्त तालिम, पाठ्यक्रममा वातावरणीय विषयको कमजोर एकीकरण, पूर्वाधारको कमी, र

अभिभावकहरूको सीमित संलग्नताका कारण विभिन्न चुनौतीहरू देखा परेका छन्। अनुसन्धानका निष्कर्षहरूका अनुसार वातावरणमैत्री शिक्षाको सफलताको प्रमुख आधार शिक्षक तालिम, पाठ्यक्रम एकीकरण, र परिवार तथा समुदायबीचको साझेदारी हो। शिक्षकको समर्थनले दैनिक क्रियाकलापहरूलाई बानी परिवर्तन गर्ने महत्वपूर्ण आधारका रूपमा विकास गर्न सक्छ, जसले वातावरणीय सचेतना जीवनभर कायम राख्न मद्दत गर्दछ। बालबालिकालाई सुरुदेखिनै दैनिक अभ्यासमार्फत वातावरणमैत्री सिकाइमा परिचित गराउनु अति आवश्यक छ, जसले उनीहरूलाई जिम्मेवार वातावरणप्रेमीका रूपमा विकास गर्न सहयोग पुऱ्याउँछ।

…….. ११ साउन २०८२

लीजा महर्जन

उपाधि उम्मेदवार

This dissertation entitled *Case Study on Eco-friendly Practices and Teachers' Experiences in a Preschool in Kathmandu Valley.* Presented by *Leeza Maharjan* on 27 July 2025.

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

……..... 27 July 2025
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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.

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DEDICATION

I dedicate this thesis to my family. Thank you for always believing in me, even when the ride was not so easy. Their unwavering support, love, encouragement, and sacrifices have laid the very foundation of whatever success has come my way. You've kept my faith in myself alive.

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TABLE OF CONTENTS

ABBREVIATIONS

3R’s	Reduce, Reuse and Recycle
CAS	Continuous Assessment System
CDC	Curriculum Development Board
ECD	Early Childhood Development
ECEC	Early Childhood Education Center
EE	Environmental education
Foz	Friends of Zoo
ISA	International School Award
JKG	Junior Kindergarten
NTNC	National Trust for Nature Conservation
SDGs	Sustainable Development Goals
SKG	Senior Kindergarten
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization

CHAPTER I
INTRODUCTION

Environment degradation and climate-related risks are now considered serious global problems, which have led to more focus on fostering sustainable habits from an early age. Traditionally, the attitude towards environmental education concern more for adults and older students. Nonetheless, children are more responsive to experiential learning, naturally curious, and closely linked to their environment, particula rly during their formative years. They frequently use their senses and intimate interactions with nature to learn about the world. These early environmental relationships provide a solid basis for developing empathy, responsibility, and environmental awareness (Davis & Elliott, 2014). Environmental education is often linked to adult responsibilities, but the sustainable attitudes and behaviors can be seeded most effectively during childhood. Eco-friendly activities are most popular in preschool settings as part of environmental education.

Environmental education (EE) in Nepal is formally integrated in the national curriculum through subjects such as Science and Social Studies which is guided by National Framework for Environmental Education policy 2013. Environmental education especially through NGOs, community groups, media, and traditional knowledge systems, plays a significant role in raising ecological awareness. Organizations such as the National Trust for Nature Conservation (NTNC), Research Centre for Applied Science and Technology (RECAST), World Wide Fund for Nature (WWF), and programs like Hario Ban implement community learning centers, eco-clubs, and public campaigns to engage different segments of society in conservation efforts (NTNC, 2012). These projects are provided with local traditions and indigenous knowledge that foster sustainable behavior at the grassroots level, such as forest stewardship and organic agriculture. The media, including local FM radio stations, also help with environmental programming, but their limited budgets and poor scheduling prevent them from having a much greater impact (Paudel et al., 2020). Informal education has proven to be a tool in empowering communities with environmental values and participatory resource management despite lacking coordination, government support, and access imbalance (Nagar et.al, 2024). Success

stories like the Annapurna Conservation Area Project (ACAP) which blends tourism, EE, and livelihood support and regional plastic bans underscore tangible impacts of EE. Initiatives like reducing ecological strain and fostering healthier environments indirectly promote both environmental and human resilience (NTNC, n.d.).

Preschool teachers play a vital role in providing environmental education, as they can model environmentally responsible behaviors and provide practical learning experiences. To do so, they involve students in eco-friendly activities with the use of various pedagogical method through which young children can be taught respect to the environment and feel responsible for it.Teachers use numerous tools, resources, and materials to promote environmental education and use collaborative efforts to create a sustainable culture within the preschool context. They also faces challenges and opportunities while integrating eco friendly activities (Constantin et al., 2024).

Various eco-friendly activities suitable for children's development can be used in early childhood settings to help them understand the environment and promote environmental appreciation. Exploratory activities like nature walk help students to interact directly with nature and, environment around them. Nature walk lets children observe plants, animals, and other natural materials. The creative activities like making models from clay, paper, or materials found in nature not just help students gain artistic skills but also help kids to better understand how living things relate in the environment. Gardening activities help children value biodiversity as they can discover the process of plant growth, and plants that grow during different seasons of the year. Integrating waste management activities in preschools helps kids learn to sort out waste, composting of biodegradable waste, reuse, recycling of waste, and the possibility to create various crafts using waste. It teaches kids to be aware of their consumption habits and use available resources wisely. One of the first-hand opportunities to teach children about environmental care is involving them in the cleaning campaign of parks or school premises. With these activities, students develop a sense of belonging and responsibility toward their environment (Minić, 2020).

It is important to instill pro-environmental habits in children as these habits help to address the rapidly increasing issues like urbanization, tourism, and industrialization. These human-driven activities cause the environment to deteriorate at an alarming rate, resulting in a variety of challenges such as global warming,

deforestation, pollution, overconsumption, and biodiversity loss. When the root cause of these problems is examined, it often points towards unfavorable attitudes and unconscious behaviors of humans against nature and the environment (Davis & Elliott, 2009). Awareness of issues related to the environment at a young age, as well as the provision of skills and knowledge to combat them, will aid in the development of a sustainable lifestyle, initiatives, mindset, and role models.

It is also essential to teach children to conserve and restore the global ecosystem. For the conservation and restoration of the global ecosystem, revolutionary changes in human production and consumption-related behaviors will be required, reflecting on both individual decisions and larger-scale, culturally mediated collective action (UNEP, 2019). Urban areas like Kathmandu valley with rising population, unmanaged waste, pollution, and encroachment of green spaces are particularly vulnerable (Luitel & Khanal, 2010). One of the main issues of the above challenges is the disconnection between nature and humans as we age, which begins early in life (Louv, 2005). The children at young age might not contribute to conservation and restoration on a larger scale, but promoting and educating them from an early age will build a solid foundation for the future and help them grow up as an ecologically cultured generation.

Environmental Education in Preschool

Preschool is an institution that facilitates the children aged 3 to 6 years where holistic development i.e., emotional, mental, social, and physical well-being of a child is prioritized (Bodrova & Leong, 2003). Behaviour formation is easier and more visible at this age. The frequent, positive experiences in nature can aid in the development of environmental education as environmental education has a lifelong impact (Wells & Lekies, 2006). Educators focus on building early skills in literacy, numeracy, science, and other disciplines, particularly during the preschool years. Similarly, the environmental education profession sees early infancy as a critical moment to begin the formation of environmental literacy (Merrick & Braus, 2013). Involving children in eco-friendly activity help students to enhance their understanding of environmental conservation and empower them to become responsible change agents in nature's preservation.

The formation of a child’s mind, emotions and behavior starts mainly in the first few years from age 3 to age 6. Children in this phase experience fast brain

development, are very curious and explore their senses (Bodrova & Leong, 2003). The best way for early childhood learners to learn is by experiencing the outdoors, touching soil, watching insects, planting trees and making original use of recycled materials (Elliott & Davis, 2009). These first experiences support children as they learn about nature, develop empathy, take responsibility and feel part of the earth. The importance of early environmental education is shown by the modern researches . The use of stories related to nature, nature walks, hikes and gardening for young learners in preschool help them to be aware of environmental issues and take care of nature (Sharma et al., 2022). Students who were involved in eco-friendly activities from their young ages were more likely to adopt environment friendly behaviours outside the classroom and also showed more caring for the environment. (Mahat et al.,2019).

North American Association for Environmental Education's Early Childhood Environmental Education (NAAEE) proposes that early childhood education in the environment should be based on approaches that involve play, questioning and awareness of place. They build on what children can do based on their age, emphasizing that environmental learning and action will continue in the future (NAAEE, 2016). Even so, many early childhood programs around the globe and mainly in the Global South, have a challenging time making environmental education an important part of the program due to insufficient policy rules, teacher preparation or consideration by the program (Aghakouchak et al., 2020). Environmental education in early childhood involves the development of information, emotional dispositions, and abilities, according to the North American Association for Environmental Education's Early Childhood Environmental Education Programs: Guidelines for Excellence (2016). The Guidelines emphasize that "the ultimate goal of environmental education is to build an environmentally literate citizenry".

Environmental literacy necessitates not only fundamental environmental knowledge, but also "a positive and caring attitude toward the environment". Environmental education must begin in childhood as attitudes are formed early in life (Merrick & Braus, 2013). The idea of sustainability has broadened the scope of environmental education to encompass a more holistic approach; yet, this new approach, particularly for young children, needs to better incorporate the core elements of environmental education, which are study of nature and interpretation. (Bailie, 2012). Kathmandu Valley, like many other urbanizing cities, faces various

environmental hazards, ranging from air and water pollution to solid waste management and loss of green spaces (Luitel & Khanal, 2010). The children are among the vulnerable group who are likely to be most affected by hazards. Yet limited empirical evidence exists about how preschools in urban Nepal are dealing with environmental issues through educational interventions.

Environmental education is increasingly accepted as a key factor in nurturing environmental consciousness and responsible behavior, but very few researchers have studied how preschools translate eco-friendly activities within the framework of daily classroom activities for the purpose of awareness and habit formation for young kids. This shows the issue of research deficit to understand how early childhood education in urban Nepal responds to environmental concerns from a pedagogic perspective. Due to the limited data the ability to assess the effectiveness of current educational strategies in promoting environmental awareness among young children also gets restricted. (Pathak et al., 2020).

Statement of the Research Problem

The worldwide issues of deforestation, desertification, plastic pollution, overconsumption of natural resources, childhood obesity, and youth violence have all been taking their toll on nature. Still, one of the solutions, if not the most vital, remains the early exposure to nature. Unfortunately, such exposure is declining (Louv, 2005). In this context, preschools play a crucial role in laying the foundation for environmental awareness among young learners. It is needed to introduce children to the idea of environmental sustainability because experiences of all kinds during formative years have such a significant impact. This can be done by having them interact with nature, learning about it in school, or just talking about it in general.

Environmental Education is included in National Curriculum Framework, 2019 and the Green School Program and Eco-smart School Certification are among the programs that help the schools in Nepal to implement eco-friendly practices. (Wildlife Conservational Nepal, 2023). However, there are still limited studies on the way the teachers incorporate the eco-friendly practices in the classroom. There is no definite knowledge about the integration of eco-friendly practices with other learning goals by the teachers or the role of these practices in the overall development of children.

A pedagogical gap also exists, as teachers are not provided with the training, resources, and guidelines. It would have helped them to turn the environmental ideas into significant, age-appropriate learning activities. Environmental education for children is usually carried out through special event based activities rather than continuous experiential learning that connects kids to nature. Additionally, there is gap in research regarding teacher perception and implementation of environmental education in preschool settings in Nepal. Most of the studies that have been carried out in the Nepalese context so far have focused on environmental awareness, in the school or community sector, with very little attention being given to early childhood education. As a result, very little is known about teachers' opinions, classroom practices, and the challenges that they face while applying eco-friendly practices in preschools.

With this context, the study seeks to explore whether preschool teachers are aware of the significance of involving preschoolers in eco-friendly activities. It studies teachers' understanding of the consequences of involving young learners in environment friendly activities. The study also investigates challenges faced by teachers while implementing environmental friendly activities.This study will explore above issues and aims to contribute new insights in the field of environmental education in preschool.

Research Purpose

The purpose of the research is to explore the experience of preschool teachers in using eco-friendly activities. The research is focused on the ways the educators integrate environmental education into their everyday teaching practices, and the impact of these activities on children's learning and growth.

Research Questions

1. How do preschool teachers experience and describe eco-friendly classroom and activities in pre-schools?

2. How do preschool teachers use eco-friendly pedagogical activities at early childhood facilitation?

Limitations of the Research

The research will concentrate solely on a private preschool located in Kathmandu Valley, which may differ from mainstream or government-run preschool models in Nepal. Throughout the study, interviews were exclusively conducted with

preschool teachers and did not include data from parents, administrators, or children, although incidental information was gathered from non-teaching staff during school visits. It's important to note that due to the specificity of the location and the organizational focus of the research, the findings may not be universally applicable or generalizable to all preschool settings.

CHAPTER II
LITERATURE REVIEW

Environmental Education in Early Childhood

The importance of early childhood education centers as a stepping stone for lifelong learning cannot be simply ignored. The years from birth to six have been identified as critical learning years for child development. The preschool period, up to six years of age, is ideal for beginning to introduce environmental concepts and developing environmental awareness in children (Gulay, 2011). During this time, children's interest in the environment is at its peak. Meanwhile, it is widely accepted that a preschooler learns through spontaneous, concrete, and, most importantly, interpersonal experience. As a result, sustainable education aims to raise awareness about the importance of adopting a decent lifestyle to help preserve the Earth's ecosystem (Scoffham & Rawlinson, 2022).

Children must be exposed to an environmental curriculum because that is where they get their information, make decisions, and then act on them (Mackey, 2012). In order to promote the practice of sustainability, application outside the classroom activity is an important part of the daily routine in preschool. Outside the classroom, the activity indicates the pre-school playground, which involves an environment connected to the students. Such activities are to bring positive benefits to children (Mahat et. al., 2019). Involving young learners in environmentally sustainable activities helps them to understand their relationship with the world, the impact of their actions on the environment, and their role in shaping the future. Children readily accept an example if it is taught or demonstrated by teachers and parents as an excellent model to be followed or imitated (Guswanti, 2017).

Environmental education's ultimate purpose is to create ecologically informed citizens. Environmental literacy necessitates not only fundamental environmental knowledge but also a good and caring attitude toward the environment. Furthermore, because attitudes are formed early in life, environmental education must begin in childhood. Several studies have linked pleasant early outdoor experiences to the emergence of adult environmental awareness and participation in environmental

practices (Ardoin & Bowers, 2020). Public awareness of the environment is a difficult undertaking since it is influenced by economic, cultural, social, and educational variables. As a result, before beginning an awareness campaign, the social environment should be thoroughly recognized (Talero, 2004). Students will be the most effective in raising public awareness because they represent various communities and cultural groupings. They can make their family members, neighbors, and communities aware. They may be more trusted in their communities than other people. Furthermore, current school pupils will become adults in the future, and they will be responsible for environmental conservation. As a result, environmental education is an important aspect to be included in school.

Early exposure will indirectly foster a passion and love for nature and its preservation in today's and tomorrow's children. To achieve this goal, teachers are important individuals who are working toward and taking responsibility for the implementation of sustainability in learning. As a result, for the teachers to be able to fulfill their responsibility to facilitate significant and positive change, teachers' education and training are important components that must be addressed, rated, and improved (Varenychenko, 2019).

Policy on Environmental Education

Environmental education (EE) has evolved to be part of global efforts to tackle the emerging natural calamities of the planet. One area of concern in the development of EE was the Tbilisi Declaration (1977), adopted in the Intergovernmental Conference on Environmental Education held by UNESCO and UNEP. This confirmation enhanced the atomic criteria and aims of natural teaching, that natural learning should commence at an early age and also be synchronized during all the degrees of teaching. The Tbilisi Declaration highlighted mindfulness, information, states of mind, abilities, and cooperation as significant outputs of natural teaching that laid a solid foundation of upcoming global and national activities.

This progress was encouraged by agenda 21 (1992) which was designed during the Joined together Countries Conference on United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. Agenda 21 acknowledged teaching, clear mindfulness and preparing as crude tools of engaging sustainable enhancement where states of the part ought to restructure their teaching models in the direction of natural duty. Based on these preceding activities, the

Sustainable Development Goals (SDGs) were launched in 2015 with the aim of underscoring the importance of environmental education. In particular, SDG goal 4.7 entails ensuring that, by 2030, all learners can access information and aptitudes necessary to promote sustainably viable improvement, but especially instruction in maintainable ways of living, human rights, sexual orientation correspondence, and promotion of a culture of peace and non-violence.

According to these world trends, Nepal has also made some drastic measures towards organized natural teaching within its national teaching methods. National Education Policy (NEP) 2019 of Nepal focuses on the inclusion of environmental awareness, climate change education and risk mitigation into the learning programs at every level. This solution acknowledges the emerging threats of natural corruption and the necessity of developing biological consciousness since childhood. Furthermore, natural mindfulness is presented as a major cross-cutting area in the School Sector Development Plan (SSDP) 2016-2023 in advancing the quality and importance of instruction. It emphasizes the need to integrate natural concepts within the learning contents and the furthering project based learning practices regarding supportability particularly at the fundamental level of instruction.

Second, the Environment Protection Act, 2019 of Nepal emphasizes the importance of fostering the idea of natural mindfulness among the people and traces instruction as one of the key tools to achieve natural stewardship. This measure reinforced the national determination to participate in natural teaching across the segments and age groups. And in this direction, Curriculum Development Centre (CDC) under the Ministry of Education, Science, and Technology (MoEST) has played an active role in instilling natural subjects in the basic instruction education curriculum. Despite the reality that there exist express regulations regarding early childhood education (ECE) that focus on the child-based and constructive learning methods, the integration of effective natural teaching at the pre-primary level is moderately immature.

Despite the above favorable arrangement activities, a significant gap persists particularly in the early childhood instructional environments. A query into it has found that despite a gradual introduction of natural instruction into formal educational modules at the essential and secondary levels, its incorporation within pre-schools has been contradictory and has often been based on individual regulation requirements

and resources. The knowledge of the natural teaching in pre-schools is of particular importance in cities that are gradually changing into urban hubs, such as Kathmandu Valley, where rapid urbanization poses additional natural pressures. In this way, this study seeks to examine the implementation of environment education within a pre-school context within Kathmandu valley, both in terms of the educational processes involved, and the overall regulation towards natural learning.

Review of Early Childhood Development (ECD) Curriculum

The Curriculum Development Center (CDC) of the education ministry created and published the national curriculum in December 2019, marking the first time that climate education was incorporated in Nepal's educational goals. "To prepare citizens to be capable of reducing possible risks and managing disasters, while being aware of climate change, natural and manmade disasters," is the applicable goal stated in the goal statement. But even after all these years, a number of education specialists and educators from all around Nepal have expressed dissatisfaction about the lack of availability of climate change education materials. (Dhakal, 2023)

Despite the fact that the necessity of incorporating young children in environmentally sustainable activities has been acknowledged, insufficient study on pre-schoolers in Nepal has been undertaken in the areas. The topics like being knowledge of the cleanliness of the environment, getting into the habit of throwing waste in a dustbin, and explaining why an unclean environment is harmful for health is emphasized in environment section of 2077’s early childhood development curriculum. On the section of environment science, the activities such as environment visit, distinguish between different materials such as plastic, glass, metals, and wood, learning about plants, differentiating land, marine, and flying animals as well as domesticated and wild animals, their growth, names of babies of animals etc were also included in the curriculum (Curriculum Development Centre, 2077).

Though some activities which will let children to get close to environment, differentiate materials and keeping environment clean are integrated in the curriculum, combined exercise that encourages students to sort their trash and learn more about reusable and recyclable garbage is not part of the curriculum, providing them with this knowledge and activities from a young age can motivate them to continue the behaviour and also can encourage other members of family, friend circle, community to do so that can lead to essential step toward waste management. Since

students are learning about plants and animals, it can be interesting to teach and make them aware of topics like endangered plants and animals, what causes them, and what more needs to be done to protect them. This will also help students become more compassionate toward the protection of plants and animals.

The 3Rs: Reduce, Reuse, Recycle in Early Childhood Context

The "Three Rs" are a fundamental component of environmental education. While children may not completely grasp the concept of waste, they may learn to reuse objects and recognize that some things do not belong in the garbage (Marwa, 2025). The production of waste is increasing, with no clear idea of how to dispose of it. Inefficient or careless disposal of waste can harm the environment and also put people's health at risk. Existing landfills are rapidly filling up. People are discovering that there are no easy ways to dispose of rubbish that they previously assumed could be buried or burned and forgotten. The three methods for reducing pollution and promoting environmental sustainability are reducing, reusing, and recycling. Furthermore, every single person can help manage garbage and make the Earth a healthier place. Current disposal methods put our health, safety, and the environment in jeopardy, while also increasing society's indirect costs. Currently, most commercial, industrial, and household waste is disposed of in landfills or surface impoundments. When waste is burned, dangerous gases are released into the air, and poisonous residues in the form of ash are left behind. In some form or another, these hazardous waste compounds find their way into humans and animals (Rahman, 2014).

Reduce: The most effective approach for reducing waste is to reduce the amount one buys. Limiting raw material use is one of the most effective techniques to reduce the quantity of solid waste that must be disposed of (Syed, 2006). The idea is to only buy what is needed and in the proper quantities. It is not necessary to extract raw materials, build goods from scratch, come up with shipping materials, use additional resources for shipping, and then figure out how to dispose of them if the product that can create harm to the environment is not produced. The matter of how long an item takes to degrade is important in deciding sustainable practices in early childhood education with preschool materials. Understanding the decomposition rates of different materials can help in selection of materials in preschool. The paper towels and newspapers decompose within 2 to 4 weeks and roughly 6 weeks, respectively. Apple cores, on the other hand, have a two-month decay time. In turn, common

plastic materials take a longer time to decompose. Plastic bags take about 10-20 years; plastic film containers, 20-30 years; and plastic beverage bottles, a scary 450 years (Environmental Protection Agency ,2013).This justifies the need to make use of eco-friendly materials and practices within preschools. By opting for items that break down fast and staying away from those that pollute the environment for decades and sometimes even centuries, educators teach sustainable behavior, imparting lessons of environmental responsibility to very young kids.

For responsible consumption, children should be taught that they should buy what they need rather than what they want, and instead of buying materials in large quantities, priority should be given to high-quality, long-lasting products. Using a shopping bag can help minimize polythene usage, and buying locally produced goods can help reduce waste and negative transportation impacts (Rahman, 2014)

Reuse: Where reduction is not achievable, waste should be reused. People have been conditioned to regard items that are old, empty, worn, damaged, or unattractive as useless, so we discard them without much consideration for their impact. As the saying goes, “One person's waste is another person's treasure”, the concept behind reuse is that the used materials that move through our lives might be a resource rather than trash. The majority of us, on the other hand, haven't even begun to tap into the resources found in our garbage. Once people decide to put waste to good use, one may start brainstorming and generating ideas.

The materials that is considered as waste or that people don't really care about can be used wisely as: containers can be used at home or in the classroom, wrapping paper, plastic bags, and boxes, may all be reused, giving outdated clothing to needy or a charitable organization, purchase drinks in reusable containers, donate old appliances to a charity or a local vocational school, which can utilize them for art classes or repair practice for students, offer furniture and household things to individuals in need, friends, or a charity if they are no longer needed, notes or rough drafts can be made on sheets of paper that have only been used on one side. Furniture that has seen better days can be reupholstered or slipcovered, newspapers can be given to animal shelters, plastic quilting, and other packing materials can be stored and utilized for further packing. When shopping, using a reusable tote bag or bringing own bags, tires that have seen better days can be reused in the garden or on the playground. By involving children in such activities, educators cultivate a sense of

responsibility and demonstrate how discarded objects can become tools for exploration and learning. Reuse is better than recycling because the object does not need to be reprocessed.(Samiha, 2013)

Recycle: Recycling is the process of converting a product or material that has reached the end of its useful life into a usable raw material for the production of another product. It can be fostered by encouraging separation at the source, which can be accomplished by monetary incentives, stimulation, legislation, and increased environmental awareness (Alhumoud, 2005). Natural resources can be conserved, pollutants can be lowered, and solid waste burdens can be reduced. Similarly, in the case of some materials, recycling is an important economic activity that generates jobs and draws investment. Recovery and usage are two aspects of the phrase recycling.The diversion and gathering of waste items from landfills, incinerators, and other disposal processes are referred to as recovery. The process of converting diverted garbage into new and valuable resources and products is known as utilization (Rahman, 2014). Teachers could set up a learning experience where children separate paper, plastic, and organic waste for recycling; thus, they come to see recycling as a means of environmental conservation. While it may not translate directly to eradicating the damages to the environment, educating on recycling along with reducing and reusing sustains a more holistic view of sustainability. Recycling activities carried into everyday routines foster responsible behaviour-enforcing the notion that everyone, including very small children, can be involved in taking care of this environment.

The attempt to encourage improved waste management through the " 3R’s" (Reduce, Reuse, and Recycle) must be done effectively. Reduce, reuse, and recycle help to preserve natural resources for future generations. Furthermore, when more goods are reduced, reused, and recycled, the amount of garbage that must be disposed of in a landfill or incinerator is reduced, allowing us to save landfill and incineration expenditures as well as landfill space (UNDEP, 2003; Samiha, 2013).

Educators play a vital role to turn the 3Rs into useful knowledge for students. When teachers used 3R practices in their classes, students followed these behaviors and also brought positive changes to both their families and their community (Mahat et al., 2019). If educators teach children to reuse containers of food, stationary, donate

old toys, clothes and use both sides of papers, they can see why caring for resources is important and better protect the environment (Samiha, 2013).

Concept of Environment Education

Environmental education is today viewed as an instrument and a process that allows people of all ages to participate and learn, based on two-way communication rather than the traditional paradigm of a one-way flow of knowledge from teachers to students. Environmental education's content and substance are also being reviewed and changed. Reorienting education toward sustainability at all levels of society requires formal, non-formal, and informal education at all levels. Environmental education has evolved within the conceptual framework established at the first international conference in Tbilisi (1977), and is today referred to as education for sustainability. This enabled environmental education to address the wide range of issues and concerns and others developed during meetings of the Commission on Sustainable Development (UNESCO 1997). As a result of international actions, a broad consensus on the concepts and goals of environmental education has formed. These essentially reflect the outcome of the 1977 Tbilisi Conference, whose Final Report outlines three objectives of environmental education is to raise knowledge of, and concern about, economic, social, political, and environmental interdependence in urban and rural communities. To provide chances for everyone to gain the information, values, attitudes, dedication, and skills needed to conserve and improve the environment. Develop new patterns of behavior toward the environment among people, groups, and society as a whole. Environmental education has long-term effects on growing environmental consciousness and attitudinal and behavioral changes in local populations. Local communities must appreciate the value of biodiversity conservation and the judicious use of natural resources in order to achieve sustainable development and conservation goals. This is especially true in areas where the natural environment is always under threat due to a variety of issues such as over-exploitation and depletion of natural resources, destruction of ecosystems and natural habitats, biodiversity loss, and increasing pollution. Organizations like National Trust for Nature Conservation (NTNC) views environmental education not just as a program for disseminating ideas and conservation messages, but also as a tool of bringing about responsive action among individuals, communities, and society as a whole. It prioritizes both official and

informal environmental education. Through its school initiatives, NTNC assists in the development of change agents in students and teachers by implementing special conservation education curricula, forming and mobilizing green force clubs, eco-clubs, friends' of zoo (FOZs), and an environmental teacher's forum. More than 80,000 students have been engaged as members of Friends of Zoo (FOZ). [National Trust for Nature Conservation (NTNC), 2023]. Environmental education encourages people to consider all sides of an environmental issue in order to make responsible and educated decisions. It also improves critical thinking, problem-solving, and effective decision-making abilities. Environmental education does not support any one position or set of actions.The elements of environment education include, sensitivity and awareness of the environment and its problems, awareness and comprehension of the environment and its problems, environmental consciousness and the drive to preserve or enhance the quality of the environment, ability to recognize and assist in resolving environmental issues, and engaging in activities that result in the solving of environmental issues (US EPA, n.d.).

Eco-friendly Practices in Preschool

The primary goal of developing environment consious values and attitude has led to an increased focus on environmental education in early childhood. Preschools are the institutions where children gain an early awareness of environmental responsibility through hands-on, age-appropriate, eco-friendly activities (Davis, 2015). In early childhood, many factors contribute to the formation of values and attitudes toward environment. Research shows that introducing environmental values during preschool years will engage children in the continued activation of environmentally friendly behavior (Elliott & Davis, 2009). Early Childhood Environmental Education Programs states that, young children need activities which will help them learn about environment, that they can experience themselves and can help link them meaningfully to the real world (North American Association for Environmental Education [NAAEE], 2016).

Typically, preschools that are immersed in eco-friendly activities should consider waste segregation, the reuse of materials for art and craft, gardening, water conservation, composting, and taking nature walks (Hägglund & Samuelsson, 2009). These activities also help children learn about ecology while building their observation and participation skills, and activities like growing plants in a garden

make kids feel a sense of care and responsibility (Elliott, 2010). Both Montessori and play-based approaches often encourage children to experience and interact with environmental friendly materials, also helps in cognitive and emotional development (Edwards, 2002). Integrating environmental themes into everyday activities can strengthen environmental concern and develop sustainable habits in children.

Environmental activities in preschools, thus, become most relevant when they fall under child-centered pedagogical approaches. The theme of the environment has been widely used to interest children through inquiry learning, experiential education, and project-based learning. By doing so, children are allowed to ask questions, witness natural phenomena, and participate in problem-solving activities (Tilbury & Wortman, 2004).The projects like reduction of plastics generation in school can be used to involve children in sorting out recycling materials, creating posters, finding alternatives, which can help them to get meaningful experiences with sustainability.

Environmental education can also be supported by showing respect to the child and to the relationship between the child and his or her environment (Rinaldi, 2004). In such a setting, natural materials, environmental excursions, and documentation of children interacting with nature constitute an important part of the learning process (Rinaldi, 2004). With practices like more natural lighting, little use of plastics, outdoor classrooms, compost bins, and systems harvesting rainwater in the school itself, communicates environmental messages (Mackenzie & Edwards, 2013). In routine practices, kids are encouraged to use their reusable lunchboxes, take part in cleaning and gardening activities, and observe nature through the seasons. Such practices, if done consistently, become embedded in the children's lifestyle patterns (Ernst & Tornabene, 2012).

Eco-friendly Practices in Context of Nepal

Wildlife Conservation Nepal (WCN) and programs such as Eco-Smart School and Green School Program support local schools in gardening and nature based teaching. The environmental topics like biodiversity, waste management, and sustainable resource consumption are integrated in the daily teaching and learning process. It promotes hands-on learning for preschoolers when preschools are included in the list of participating institutions (WCN, 2024). One preschool in Rautahat district, conducted the Climate Change and Sustainability Program in which they involved children in planting trees. It also included parents in the process and the

activities were extended to home thus promoting long-term sustainability (Development Times, 2024).

The practice of waste management in schools has been another major environmental care practice to be introduced in Nepali schools. The Eco-Smart School project involves the separation of waste, material recycling and composting as students' daily school activities (WCN, 2024). The Green School Campaign of Unnati Nepal educates schools about the necessity of cleanliness and recycling and also supplies bins and combines educational programs (Unnati Nepal, 2023). Child Workers in Nepal (CWIN), a youth environmental platform, helps schools go green by conducting advocacy for composting and organic decomposition (CWIN, 2024).

Wildlife Conservation Nepal (WCN) and the Curriculum Development Centre (CDC) have worked together and have created a Green School Resource Handbook that aids teachers in the integration of environmental issues in different subjects of science, social studies, and health (WCN, 2019).The School of Sustainable Living operated by the Himalayan Sustainable Future Foundation (HSFF) models sustainability education by linking eco-friendly practices with daily living and inspires similar approaches in other educational settings (HSFF, 2025). The Government of Nepal, with the introduction of the Green School Directive in 2018 and in collaboration with WCN, has provided structural support to the above mentioned initiatives. These programs, while being significant, are still in their overcoming stage within the preschool settings so greater institutional support and teacher capacity development will be required to ensure the long-term impact of the programs.

CHAPTER III
RESEARCH METHODOLOGY

A research methodology describes my journey of conducting this research. I used case study methods to investigate research questions that aim to uncover teachers' opinions, teaching approaches and circumstances impacting the eco-friendly practices in preschool classrooms. The use of case study research gave me a space to get insights from the preschool teachers. This research is guided by interpretivism, which aims to comprehend the individuals' subjectivity as well as the social interrelation through them (Bryman, 2016). The study highlights the preschool teachers' views and methods concerning eco-friendly practices as the main subject, giving special importance to their personal experiences and the meanings they place on them. The interpretive method fits well to the case since it gives the possibility to see how the teachers comprehend, execute and scale-up environmental education practices in their classes, which is very often influenced by their own belief, creativity, and contextual constraints.

In line with this research philosophy, the study employs a constructivist paradigm that views knowledge as a result of social interaction and experience (Creswell, 2014). Teachers' viewpoints and their classroom experiences are not considered as fixed facts, but they are seen as the developing understandings that are influenced by the surrounding values, beliefs, and daily practice. The introduction of environmentally friendly practices in early childhood education was gradually accepted by the various learning theories that entirely correspond to the mentioned philosophical foundation. The methodological approach of this research is, moreover, backed up by educational theory that hold learning via experience, social interaction, and observation as the most important ways of acquiring knowledge. Dewey's experiential learning theory (Dewey, 1938) stresses the necessity of being actively involved in significant activities, which is similar to the emphasis on hands-on eco-friendly practices in preschools. Bandura's social learning theory states that children learn by observing, imitating, and being reinforced (McLeod, 2011; Putra, 2024). Teachers in eco-friendly classrooms show the children the right way to behave

sustainably and the children then acquire the behavior by observing and imitating not only the teachers but also the other children. Theories like these lend support to the constructivist view that learning is a social and an experiential process, and thus, knowledge is co-constructed through interaction and observation rather than being directly passed on through the instruction.

Taking this philosophy and theory as a basis, the qualitative case study method is taken as the most suitable choice. This method allows to have a comprehensive view of teachers' experiences, their practices with children, and the contextual problems that influence the adoption of eco-friendly education in preschools.

Case Study Research Design

Case study is a qualitative research designed to study a particular topic, grouping, setting, or event in detail and within the real-world setting. According to Yin (2018), case study research as an empirical inquiry that investigates the case in depth and within its real-world context. It relies on multiple sources of data, including interviews, observations, and documents, all of which together provide an opportunity to understand the case in great detail and holistically.

The case study method was used in this research because it allowed for an in-depth understanding of how eco-friendly activities are practiced in a real preschool setting. I could observe classroom activities firsthand, listen to teachers' viewpoints, and observe the ways in which eco-friendly activities are being implemented and taught to young children. It also allowed me to draw from a variety of sources of information like interviews, observations, and documents, which have helped to develop a very rich and detailed portrayal of what was occurring in the preschool. The approach was helpful in match up teachers' experiences with their real-world practices occurring inside the classroom.

Research Site and Participants

The research was conducted in a privately run preschool located in Kathmandu Valley. The preschool covers 2.5 ropani area which includes buildings, playzone, playground and a small farm. Based on the school's child-centered focus and its environmental initiatives, the preschool was chosen for this study. Establishing a setting where participants are able to have direct experiences related to the research topic that are rich and meaningful is crucial for thorough understanding (Creswell & Poth, 2018; Yin, 2018). Since the involved teachers in the preschool were already

undertaking environmental activities with young children, this preschool was considered appropriate.

The preschool employed a total of 10 teachers at the time of study. From this group, six preschool teachers were selected who had direct experience in involving students in eco-friendly activities and were actively involved in classroom activities. Each participant had been working at the preschool for a minimum of one year, ensuring familiarity with the institution's practices and routines. All the participants were females and had varying levels of professional training in early childhood education. Including participants of varying range of experiences, it provided an abundance of perspectives on incorporating environmental concepts in early learning settings.

Introduction to Participants

Six teachers of varied ages and years of experience working with preschool children were interviewed. To maintain confidentiality, pseudonyms have been used for participants: Pooja, Sudha, Sara, Devi, Rina, and Priya.

Pooja is 38-year-old preschool teacher with 5 years of experience working with preschool children.

Sudha aged 22 years old, the youngest participant in the study. She has been teaching for 1 and half years and currently working as grade teacher of Junior Kindergarten (JKG).

Sara is a teacher in her mid-fifties with 30 years of experience bringing most extensive experience among all the participants. She has worked with preschool children to grade 8 students in various schools located in the Terai region and Kathmandu valley.

Devi is relatively a new teacher in her mid twenties with the teaching experience of 1 year. She is working as a teacher of Senior Kindergarten (SKG).

Rina is the fifth participant in her thirties with the working experience of 6 years and grade teacher of Nursery.

Prity is 36 years old teacher who initially started teaching career with Montessori based school and later joined Early Childhood Education Center (ECEC) affiliated organization. She has 6 years of experience working with preschool children.

The study includes participants from across the experience spectrum, enabling them to evaluate rich insights into how eco-friendly activities are perceived and practiced across different levels of preschool teaching in Kathmandu Valley.

Data Collection and Interpretation

The data collection process for this study involved conducting semi structured interviews with the teachers of selected preschools. An interview guide based on the research questions was developed so that core topics related to research were addressed with each participant. The interview questions were open-ended which allowed participants to freely elaborate on their thoughts and experiences. One-on-one interviews were chosen purposely to explore individual teachers' experiences and insight on eco friendly activities and its implementation. To ensure a comfortable environment for teachers , all the interviews were conducted in the classroom within the preschool premises. Additionally, I got to observe classroom and school materials that further enriched the data collection process, offering detailed insights .

The stories and experiences of the preschool teachers were the primary data for the research. These stories, field notes, audio recordings of interviews, and photos taken during the school visit, school guidelines or frameworks related to environmental education or eco friendly activities served as the basis for the data analysis procedure. I used triangulation to make the findings reliable. It refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Carter, et al., 2014). Triangulation helps to check information across different sources and build a clearer and more trustworthy understanding of the study topic. (Carter, et al., 2014).

The recorded interviews were reviewed multiple times to make sure the information shared by teachers was captured accurately. It helped in the transcription process and also helped to preserve the essence of each teacher’s story and experience. Writing down these cases and stories helped me further in understanding the actual implementation of eco-friendly activities in preschools. Combining various sets of data such as interviews, classroom observations, and photographs, this study aims to provide a fuller picture of environmentally friendly practices in preschools in Kathmandu Valley.

Thematic analysis was done on the data collected from interviews, field observations, photographs, and documentations. It was chosen because of its potential

for flexibility and for identification, analysis, and report of themes in a systematic way.

The first step was to get familiar with the data. I listened to the tape of the interviews several times. I read the transcripts several times to try to reach the interpretative depth of the speakers, in this case, the teachers. Likewise, I went through my field notes and revisited the photos to note early impressions and important points. At this stage, I noted initial ideas down for later use. Then, I coded the data under the four broad categories of teachers' actions, beliefs, challenges, and classroom practices regarding eco-friendly activities. The codes were further grouped to seek the relationships and patterns. Initial themes were drawn from the patterns as signals of common lived realities, activities, and ideas repeated among teachers.

I reviewed and changed themes for more clarity and uniformity. I compared the coded data under all the themes to ensure that they present the voice of the participants, which holds for the whole data set. Subsequently, names and clear definitions were given to all themes to indicate the main idea they represent. The last step is writing the findings as one connected narrative. The themes were presented concerning the research questions and supported by direct quotes and examples from teachers. The analysis also interpreted and explained the meaning of data in the context of eco-friendly activities in preschool in Kathmandu Valley.

Ethical Consideration

Several ethical issues were carefully taken into account when conducting this study, in order to respect the rights and welfare of the participants. The preschool teachers were informed in detail about the research objectives and procedures before they became the participants of the study. Each participant gave verbal consent before being interviewed. They were also reminded that it was voluntary and they could pull out at any time they wanted without any form of negative consequences. Any personal data and information obtained in the course of interviews and observations were anonymised and stored in a secure place to ensure that the identity of the participants was not disclosed. The participants were made aware that the information they provided would not be disclosed to a third party and that it could be used in the context of this research study only. During the interviewing process, all attempts were undertaken to respect the participants and to appreciate their time and views.

A system of pseudonyms is adopted to ensure the confidentiality and privacy of the individuals that took part in the study. Hence, any meaningful comments or quotes made by the participants were identifiable with their respective pseudonyms in the course of the study. The necessity of using pseudonyms guaranteed the confidentiality of participants without sacrificing the possibility to report the results of the study accurately and informatively. The research followed the norms and values as determined by KUSOED.

CHAPTER IV
EXPERIENCES AND UNDERSTANDING

Teachers' Experience and Understanding of Eco-friendly Classroom and Activities In Preschool

The introduction of environmental concepts to little children faces two opposing arguments. Some believe that the preschoolers are too young to grasp the complex term of environmental issues and other believe that this is the best time to instill eco friendly behaviour. But all the teachers repeated that eco friendly activities are vital in the education of preschoolers. They emphasized that early childhood is the best period to nurture children with a sense of the environment and environmental values. Teachers expressed that instilling eco friendly practices is natural and essential at this age.

Sudha, one of the teachers, said that children in preschool are at the stage of forming a basic attitude and values. She pointed out that whatever is presented at this level, tends to be permanent. She says that,

> "*What is instilled during early childhood matters greatly in shaping future behavior and perspectives, involving them in eco-friendly activities is not only beneficial but necessary."*

Likewise another teacher, Sara also mentioned that *a solid foundation must be considered using the Nepali saying, जग बलियो त घर बलियो which translates to*

> *"If the base is strong, the house will also be strong". Teaching children about environment and eco-friendly activities from a young age cultivates a life long interest and respect towards the environment.*

To these teachers, it is not possible to educate preschoolers about the environment; it is just a significant part of the balanced education of a child in his early years. There were also instances where the teachers associated environmental learning with cultural and moral education. According to her, the perception of world by children should not be limited to the academic world but must also encompass the empathy, respect and care of the environment. One teacher explained that,

> *“ Just as children learn to greet, say thank you, sorry , to share and show kindness they also school learn to learn to appreciate, love, and protect the environment. Environmental education is equally important alongside their cultural and moral education.”*

When sharing what makes a classroom eco-friendly, teachers linked it with the idea of simplicity, naturalness and harmony. For the teachers eco-friendly classroom is not just a physical space filled with green materials but living environment that communicates care and respect to nature. It should model sustainability through daily experiences. Rina shared that ,

> *“ an eco-friendly classroom a place where the preschoolers can observe, touch and sense the contact with nature on daily basis.”*

It transcends the visual aesthetics. The greenroom classroom must be an environment where children can interact meaningfully and deeply with the environment. Devi also shared that,

> *“I believe that an eco-friendly classroom should be alive, there must be plants, sunshine and air. The preschoolers are able to feel relaxed and at home which is also learning when they view plants growing or the sunlight entering the classroom.”*

The eco-friendly classroom is both physical and pedagogical environment where the space and teaching interlinks with ach other. Teachers shared that classroom itself teaches with the arrangement of classroom, materials used and atmosphere. Devi thinks that,

> “*The materials used in classroom also can teach children how to care for the environment. If natural things are used as muh as possible instead of plastic, it shows the concern toward the environment.”*

The classroom decorated with overloaded with plastic toys, synthetic decoration and artificial bright colours and light might not be suitable for the classroom to be eco-friendly. Instead of these, materials made of wood, clay, paper etc are more preferable and also encourage in children’s sensory engament and creativity. Prity commented that,

> *“ Children learn best when they feel and touch the real things. Natural materials make children more observant and curious and helps connect better to what is around them.”*

Teachers realized their role as modeling the environment conscious values through their one behaviors. Prity said ,

> *" Our action speaks louder to children than what we say so we have to depict eco-friendly behaviour in our daily life. If I use paper carefully, they watch and do the same at this age. They notice everything their teacher is doing." It is very important to create sense of belongingness to nature instead of separating the environment for daily life."*

Teachers also repeatedly mentioned that instead of separating learning about environmnet from daily life, it's important to create a sense of belonging to nature. One teacher expressed this clearly,

> *" We should not teach students about the environment, not just the subject. It should be part of how children live and play. When children play with soil, water, or see flower bloom, they learn without realizing it. They start loving nature"*

Children are naturally curious and this can be driving force for learning about environment. Children ask questions like Why leaf is green? Why is the sky blue? Why is it round ? These moments help to talk and think about nature. Furthermore, teachers viewed eco-friendliness as a way of thinking, not just set of visible practices. It should foster mindfulness, responsibility, and appreciation for the world. Eco-friendly classroom becomes a space where children incorporate attitudes of respect, curiosity and care through observation and experience. Teachers also linked eco-friendliness to our cultural traditions, which highlights living with nature in harmony. One teacher mentioned,

> "*Our tradition and culture have always respected nature and it aligns with protecting it. We worship animals, trees, river, soil, etc in different occasions. Teaching children to protect nature is also teaching them about our identity. Eco-friendliness and environmental awareness is not only global but also deeply local and aligns with Nepali culture and tradition."*

The emotion of the children can be toned up and down based on their environment. Students might feel calm or happy when in peaceful space as compared to noisy or messy environment. The calm space in eco-friendly classroom consisting of natural light, plants help children to stay calm and become more gentle and relaxed. The eco-friendly classroom is an integration of physical, emotional, cognitive and ethical

learning. Many also connected school's eco-friendly environment with the community's environmental culture. The things shared at home reached school and vice-versa. When the child remind their parents to turn off light, throw waste in dustbin etc, the school learning has reached their home. It shows school can serve as small but powerful agent of social change. The consistent exposure to eco-friendly environment and practices, children can act as messengers carrying the lessons beyond the school walls.

All the teachers seemed to have clear understanding of eco-friendly environment and practices but they face various challenges to implement the knowledge. A major challenge identified by teacher is the lack of environmental friendly space or infrastructure in the school compound. Pooja shared,

> *"We want to involve students in environmental education activities, but find it restricted in school compound and it is also not feasible to take children for a field visit for every topic due to time, logistical and safety issues."*

Another teacher Prity noted,

> *" Some parents question us why the students are involved in the activities done in environmental day rather than focusing more on the academic course or other cultural celebrations."*

This indicates a lack of awareness among some parents of the importance of incorporating environmental education in early childhood for their holistic development.

Though educators meet some challenges, they have found different ways to continue teaching about the environment. When visits are not possible they use available classroom materials, indoor simulations, crafts, role play etc to teach environmental concepts. When addressing what is most crucial in environmental education, teachers point out it is important to ensure children respect the environment, recognize their surroundings and modify their behavior.

Teachers also mentioned that they haven't taken any training aimed at teaching environmental education to young learners in preschool. Though participants have been to numerous teacher training courses, focused on teaching methodologies, phonics, classroom management, etc they never received specified training in environmental education or application of eco-friendly education in classroom. According to Pooja,

> *"We have not yet been provided with training on environmental education. With effective training, teachers would be better informed and able to arrange various activities for students. We have received education on teaching methods and the rest of the group really wanted to join special environmental education training sessions. We feel that such preparation would allow us to organize suitable activities and improve what happens in the classroom. I feel that using a plan would increase the reliability of teaching environmental knowledge. Now, we collect knowledge by searching the internet or through collaborating, ideas sharing with other teachers of different grade."*

They also stressed the way they affect students' minds and called for precise facts to be taught. They understood the need for guidance and knowledge to make them affirmative, exact and admirable figures. Prity and Pooja expressed,

> *"As a human we also make mistakes but even if a teacher is wrong sometimes unknowingly, teachers are always right for the kids. One time in homework if we missed any alphabets and parents tries to correct it at home, students didn't budge saying my teacher have written this so I would do same. So, we should remember to act positively. Learning the correct information in training will improve our abilities and enable us to help the environment at school and in the classroom."*

All things considered, teachers have received additional training in teaching, yet they lack proper guidance on environmental education. All the teachers felt that environmental education training would enable them to present this subject much better. It was recognized that their own everyday practices should be environmentally friendly and so training was an essential part of improving their efforts.

Eco-friendly Pedagogical Activities at Preschool

A wide range of interesting and creative activities were used by teachers in their classrooms to facilitate the teaching of the environment. These activities were made both hands-on and age appropriate such that children were not only taught about environmental concepts but also had fun in the process. Along with the knowledge about the environment, the activities also contribute in holistic development which includes psychomotor, cognitive, emotional social and spiritual development of preschoolers.

Psychomotor Development

One of the important events that was mentioned often by teachers was the celebration of Environment Day which was also referred to as Green Day. Children of various levels were involved in numerous activities on this day including planting saplings, bottle gardening and watering plants. The foundation children were engaged in the watering of the plants and junior kindergartens engaged in planting saplings and senior kindergartens engaged in bottle gardening. Such activities enabled the children to have firsthand contacts with nature and how essential it is to nurture the living things. Not only that the activity like watering plants, planting saplings and managing bottle gardening requires childre to use precise hand movements and control. Foundation children enhance the basic eye hand coordination through simple watering activities, while the older students strengthened the hand muscle and enhanced coordination engaged in planting and forming bottle garden. The movement involved in gardening also help develop gross motor skills as they kneel, squat and bend to plant seeds and perform other physical tasks.

Hands on participation during environment day activities expand psychomotor learning into structured and purposeful actions. Engaging in planting sapling includes planning, sequence, timing etc. Watching the sapling grow into plants help develop patience and also help them understand the need of consistent care. "*When planting, watering and caring for plant, children learned to follow steps and develop the sense of rhythm in their tasks.*" It shows how environment activities support both fine and gross motor skills.

According to the teachers craft activities involving recycled materials were also well-received. Children reused leftover paper from other lessons to create new crafts, and they made artwork using natural materials like leaves, clay, and twigs. These activities not only encouraged creativity but also reinforced the concept of reuse and recycling. Prity stated that,

> *" We are using seeds of hog plum (लप्सी), lids of plastic bottles for teaching them counting and other alphabet formation activities in the classroom. I have also seen other schools using the corn cob to involve students in threading activities, which I would like to add to my class as well. During the participation of senior kindergarten students in Preschool Olympics, they were also involved in various nature-based activities, including visits to parks,*

> *collecting natural resources like leaves, grass, pines, twigs, pebbles, etc, available and making art & crafts out of them, and free play with those materials which gave us more ideas on what activities can be included further."*

The placement, holding of these natural materials help in fine motor skills whereas assembling materials for artwork and alphabet formation support in spatial awareness and motor sequencing.

Creative arts and performance were also used by teachers in teaching environmental themes. The children were involved in dramas to pass across messages like: do not litter, do not burn plastics, and the importance of tree plantation. During such performances, children acted as trees, water taps, and family members and this made the learning experience very vivid and effective. These role-plays were informative as well as entertaining to the students. Devi stated further that,

> "S*tudents of senior kindergarten even volunteer to choose the part they would wish to play in drama. The children were very responsive to such activities."*

Dramas and role play activity encouraged gross motor skills as the children moved around and performed action. It also help in spatial awareness and teamwork. One community based event mentioned by teachers was the celebration of Asar 15, an annual festival of rice planting in Nepal. Children were involved in paddy fields, and they had the delight of playing in the mud and relating to the agricultural base of their culture. The activity enabled them to enjoy nature in a fun and meaningful manner. In paddy field, children move carefully through uneven and muddy place. They control their body an navigate the obstacles which helps to develop physical strength as well as environmental awareness.

The teachers stressed on the need to incorporate common environmental contexts and habits in the lessons. Children had a direct linkage to the local farming practices through paddy planting activity. This festival could enable children to learn how rice is grown, the significance of water and soil and seasonality of farming. The practice of this tradition enabled children to value the environment and know how their community relates to nature. Teachers also explained that most of the time instead of talking about environmental issues directly, they use approaches such as drama, storytelling etc, to communicate the message.

While observing the curriculum used in preschool, it also included field visits. During visit students have to be physically active, interact with the elements present in environment which helps in development of strength and confidence while navigating the outdoor environment. Waste management and sorting activities are also notable in development of physical skills. Handling different types of materials and separating biodegradable and non-biodegradable waste and also placing them in correct bins required eye and hand coordination. Sorting waste task is enjoyed by students and they also take their learning to their home, which indicates how psyhomotor skills learn in class is transferred to daily life.

Cognitive Development

Preschool teachers reported that eco-friendly activities provided children with opportunities to engage in meaningful, hands-on learning that enhance their curiosity, analytical thinking, problem solving and reasoning. One teacher shared that,

> *" The students loved watching the saplings they planted grow and were happy and proud to see the change over time."*

The planting activity is not just an activity to engage the children with nature but it also teaches them about the lifecycle, concept of growth and responsibility needed to care an organism. The students observe growth of plant regularly and make connection between cause and effect. The plants will grow when watered properly and get sunlight, if it is neglected the plant will wilt. This simple observation helps in development of cognitive doman like memory, prediction and reflection. Including categorizing plants by size, colour, type of growth of plants also help them understand classification and organization. The activity of plantation of paddy on Asar 15, observing and participating nurtures their curiosity, let them ask questions, draw conclusions and link cultural practices to ecological knowledge as well.

Another key activity mentioned by teachers was waste segregation. It is a cognitive task that teaches children on sorting waste according to the nature of the waste materials. While sorting the biodegradable and non biodegradable waste students have to think on which waste will rot and which will not and categorize them, it encourages students to apply reasoning skills. This task also introduces concepts like decomposition, recycling and waste management to students.This activity made children know the value of proper disposal. Along with it the children's ability to think critically about everyday waste also enhances and it also aware them

on how they can influence the environment throughbtheir choices. Devi teacher reported that,

> *“ The activity was designed in game form making it enjoyable and easy to remember and also enhancing their critical thinking.”*

Another excellent activity in which children’s are involved is field visits where they can connect their classroom learning with real-world experiences. Sara explained that,

> *“In response to the question asked to students on where you get milk? some students replied: from dairy, this stresses the importance of experiential learning. Visits to farms gave the children an opportunity to observe the process of getting milk. It assisted in the development of a more profound and more precise perception of environment, animals and sources of food. During the dairy visit, the senior kindergarten students also monitored the environmental conditions of their locality on the way to the dairy visit. They also noted either anything was eco friendly or they needed to do anything better. This real-world experience assisted children to connect classroom information with the real world.”*

During the visit teachers also encouraged students to ask question to the encharge of farm, make observation and reflect on their surrounding. They got to connect classroom concept to the field visit, which made the learning more tangible and relevant. This experiential learning combined with cognitive tasks of observing, asking question and comparing contribute in intellectual growth of children. Another teacher Rina mentioned that,

> “*Our school also received the ISA Award in which students were involved in different projects related to their curriculum and there was mention of different SDGs for each project. For example students learned about home, food and sound of animals as a project which was linked with a related goal.”*

The International School Award (ISA) is an accreditation for international dimension good practice in schools. Connecting Classrooms through Global Learning supports schools worldwide so that young people develop the knowledge, skills, and attitudes required to prosper. The Connecting Classrooms initiative attempts to educate teachers and students so they may make a difference in the world, over and above the understanding of global issues. Among various advantages of connecting classrooms

is one of the schemes that support the international collaboration between young people in their communities, aiming toward the Sustainable Development Goals (British Council, 2019).

While observing, the action plan for the ISA award was formed with various project links with children's curriculum like healthy food and junk food, odd and even numbers, community helpers, wild animals, etc. Each project was linked with SDG's like, good health and well being, quality education, life on land etc. Engaging in ISA projects allowed students to explore the relationship between their local environment and global issues. In a project of Healthy and Junk food, children learned to differentiate between healthy and junk food and also connect these ideas to wider topic of nutrition, health and environmental sustainability. It inforces critical thinking by encouraging children to see how human choices/ their choices affect personal as well as environmental well being. Rina shared,

> *"Children see that food we consume has connection to enviornmenet and they began asking question about the origin of it and how it's produced?"*

It demonstrate the children's growing capacity of reasoning and inquiry. These activities and progress shows that children are capale of engaging in basic critical thinking and cause and effect relationships. Teacher also shared that as much as hand-on activities are essential, it is important to develop cognitive skills like reasoning, dialogue reflection. Sudha clearly stated that,

> "*I have not included much of the sole discussion on environmnetal issues with the kids. I want to begin having chats where they can express and think about their views."*

Emotional Development

The participation of children in eco-friendly practices also nurture positive attitudes, empathy, self efficacy and responsibility towards nature as mentioned by teachers. The teachers shared various situations where they saw their students exhibit certain behaviors or attitudes to the environment in terms of sustainability and conservation of nature. The children's responses to eco friendly activities were overwhelmingly positive.

Childrens were actively engaged when learning hands on. Rina mentioned that while involving my students in watering activity, the children were very excited.

Another teachers Pooja and Sudha emphasized the importance of involving students directly,

> *"The students loved watching the saplings they planted grow and were happy and proud to see the change over time. If the plantation had been done by the school staff, the impact would not have been same."*

The process of planting and taking care of a plant made children gain a feeling of responsibility and attachment to nature. Teachers observed positive behaviour shift in students. The enthusiasm and behavioral changes in students demonstrated that preschoolers are not only capable of understanding environmental concepts but are also eager to apply them in their daily lives. Several teachers mentioned the incident where students reminded their friends to not litter and take care of environment. Pooja shared an incident,

> *" A student was hitting the branches of plants with his bottle and other friend went and reminded him how they should not damage the plant unnecessarily.* Sudha also explained that, *Children began telling each other not to throw the waste wherever they want but to throw it in dustbin. Sometimes, they would report to me that friend had littered."*

In one incident remembered by Sara,

> "*During the paddy plantation on Asar 15, we've taken students in field and most of the students were enjoying playing in the mud but some students of foundation were scared to step on the mud."*

Community based events like this also helps to enhance emotional engagement of children. Interacting with natural landscapes, and participating in collaborative project build pride, sense of belonging and emotional investment in nature. Role plays and performances on topic of environmental issues not only enhance cognitive and psychomotor skills but also fosters emotional expression and empathy. In drama about water conservation students expressed concern for plants, water sources and living beings expressing and sharing their collective emotion. Volunteering to select the roles to perform instill pride, autonomy and confidence, reinforce intrinsic motivation to care for the environment.

The teachers also stressed on the importance of parents role in instilling environmental education in children. They expressed that school and teachers play

vital role but parents modeling and practices at home is equally important in shaping the young ones attitude towards environment. Rina shared ,

> "*We do our part at school, but parent have to support the eco-friendly activities at home as well. If parents don't care about environment then it'll be difficult to instill that in children. The contrasting behaviour child see/ learn in school and home might create a dilemma."*

Sara also shared,

> *"Eco-friendly practices shouldn't stop at school gate. Children learn by watching their parents and home is their first school. The collaborative effort of parent and teachers will make it easier for child to grasp the concept of environmental education."*

Prity mentioned that,

> *"Manners like greeting elders are learned initially from home, similarly, environmental friendly activities also should be initiated from home."*

The alignment between home and school practices promote consistency, reduce confusion and strengthen emotional connection with nature.

Teachers also emphasized the need of using creative and playful methods to discuss environmental topics with preschoolers. Due to the complexity of environmental issues, they chose to present them by engaging students with stories, role-playing activities and different forms of multimedia. The methods made learning more fun for students and encouraged them to be more attentive. Many focused on using actual environmental activities to teach kids. Educators noted that learning from experience was more valuable than learning passively listening to a teacher. Devi observed that,

> *"Just discussion about the issues is not as useful as taking part in activities where students experience, practice and prove their learning. Kids would participate by planting, watering, sorting garbage and using materials from nature for their craft projects."*

Teachers involve students in various activities considering the different stages of children's development. Starting with basic tasks and slowly progressing to more challenging ones helped the students learn about the environment appropriately. Prity shared that,

> *"We design various activities based on the age of the students. Foundation students are involved in simple activities whereas junior kindergarten and seniors are involved in little complex tasks.*

Teachers also believed that environmental friendly activities helps in the holistic development of a child. They found several ways in which the children could develop further, for example, by using critical thinking, cooperating with peers, caring for others and building their fine motor skills. Teachers observed that students share what they have learned in school at home and work in groups at school which help develop their social skills.

> *"When we take senior kindergarten for surrounding visits, students observe their surroundings, critically analyze the situation and reflect back as well which helps develop their cognitive skills. We let students explore different materials , their textures, let them make crafts, etc which help in development of their motor skills."*

The eco-friendly practices and discussions helps enhance various skills in children, the teachers evaluate to see the understanding and development of skills in children. Teachers often review how the experience of eco-friendly practices changes the behavior of their students. Instead of testing, they monitor how kids learn from nature in their everyday lives and interactions with the community.

Many of them spot the results when students begin reminding their friends not to throw trash on the ground or when they get creative with waste items. The change in students reflects the success of teachers' work and efforts. While eco-friendly practices has no distinct, standardized assessment, its ideas are worked into the continuous assessment report that happens in preschools. Overall development in students is evaluated by teachers in the process of learning about the environment.

They reported that environmental understanding is included in the "Knowledge and Understanding of the World" section when evaluating continuous assessment.The indicators are: Are children allowed to discover and learn about the importance of the environment? Are they interested in observation, exploration and investigating the natural world? Are they dedicated to looking after nature and all animals?

During classroom observations, it was noted that teachers used an extensive range of materials to support the teaching of various concepts to the little learners.

These were natural materials such as lapsi seeds, twigs, leaves, and pebbles, and man-made materials consisting of various instructional aids: plastic models of fruits, vegetables, animals, and other common toys. The natural materials became part of activities involving counting, classification, or sensory experiences, thus allowing the kids to engage naturally with the materials. The plastic models, on the other hand, were visual aids for vocabulary development and concept recognition. This use of natural materials-cum-plastic materials signifies a mixed message with regard to the environment. It raises questions concerning the consistency of environmental messaging when they mix non-sustainable materials with those that are eco-friendly.

While observing their classroom various decorations using the waste materials were hung in the classroom. The classroom name board was also made using rolling the waste papers. They also had a box of collectables which contained waste materials like bottle cap, pen cap, old pens, small pencils which can no longer be used for writing etc which were used to form alphabets students were learning, enhance numeracy skills, make crafts with loose parts, categorize them etc.

The world is changing and so is the way children are taught, teachers suggested few ways that could help to improve and practically apply eco friendly practices in their classrooms. They suggested using Earth Day and Environment Day as a starting point, but that they should incorporate environmental lessons into daily classroom activities. It was understood by teachers that having children experience environmental lessons many times helped them remember and carry out these values. Pooja believes,

> "*Eco-friendly activities should take place all year round. Regularly repeating and practicing these tasks allows children to grasp and remember them."*

Similarly, Prity felt,

> "L*earning about the environment should become normal in class, not only something students do in one lesson. It should be included in the daily practices of the school and classroom environment."*

Some educators mentioned that giving students time to express their opinions and discuss environmental matters was very important. There is a move towards helping even young learners build their critical thinking and awareness of environmental issues. Devi said,

> *"I want students to see both green areas and deserted spots so they reflect on the problem we cause when we neglect the environment. I also want to include students in projects connected to the environment to get them to explore the subject more. I want to involve students in project work and even assign home projects where children work together with their parents. This could help bring positive environmental changes at home too.*

Rina noticed,

> *"Even though the session was given to student focused on waste segregation, students are not really involved in handling it. Participating in the division of food, paper and plastic waste would show them how what they learn is put into action. While we have less wrapper waste because food is served in school, students could still benefit by getting involved in waste management process."*

Social Development

Teachers have stated that adopting eco-friendly practices in the classroom facilitated the social growth of preschoolers. The environmental education activities were often such as children communicating with one another, taking responsibility together, thereby working and learning as one. Activities like gardening, waste sorting, and making crafts from natural or recycled materials were in fact teamwork and collaboration. According to Devi,

> *"When we do gardening or waste sorting, students work together. Some help their friends water the plants, others remind each other where to throw the waste. They learn to cooperate and care for their surroundings."*

Teachers noticed that children climbed up on their empathy and social awareness as they told peers not to throw waste or pull out the flowers. Pooja commented,

> *"Sometimes, students remind their friends not to step on the plants or to throw the wrapper in the bin. They begin teaching each other what they have learned."*

Role-playing and dramatization also provided the basis for developing children's interaction and communication skills. Acting different parts like trees, animals or caretakers demanded such skills as co-operation, listening, and taking turns and understanding different points of view at the same time. The rice planting activity

was one of the major events of this festival where children, teachers, and peers collaborated and hence their sense of belonging was further strengthened. Rina observed,

> *"During Asar 15, when we go to the field, children help each other walk through the mud, and they enjoy it together. It builds teamwork and also connects them to their culture."*

Through these kinds of experiences, the children acquired a feeling of community, empathy, and responsibility not only towards each other but also the surrounding environment.

Spiritual Development

The teachers also pointed out that the eco-friendly practices contributed to children's spiritual bonding with nature and were the stepping stones of the values of gratitude, respect, and compassion. The kids who were involved in the direct interaction with nature like planting, watering and taking care of plants got a sense of amazement and attachment to the living beings. Pooja said,

> *"Proud and happy they feel when children see their plants growing. This is my plant. The attachment they develop shows and how they begin caring for the living beings."*

The preschoolers were thus able to see the beauty of nature through the cycles of growth, interdependence and the beauty of nature. Teachers noted that when children showed happiness at the sight of plants thriving or expressing sadness when they died, it indicated spiritual consciousness bondingmeth and empathy with the living. The culturally significant ceremonies like rice planting on Asar 15 were also enhancing this bond. Sara said,

> *"Paddy planting participation gets the children to realize how much labor is involved in producing food. They become appreciative of the farmers and the environment."*

Such experiences enabled the children comprehend the human and nature relation and the necessity of planet care. The teachers also indicated that the agreement between home and school regarding environmental values greatly improved kids' moral and spiritual awareness. Rina expressed,

"The children will see the same values everywhere if their parents also practice what we teach in school, like not wasting water or taking care of plants. It becomes part of their identity."

The children through repeated nature interactions and adult continuous modeling developed a more profound understanding of life and the environment. On the whole, environmental activities helped to build respect, interconnectedness and gratitude which are the main aspects of spiritual development.

Educators said that they would prefer to introduce more environmentally friendly materials to use in the classroom. This proves that many teachers are currently much interested in sustainability and willing to educate young children to take care of the environment. Sara said that she will start using more environmentally friendly materials in the classroom, thus allowing children to watch and follow her example. Certain suggestions were put forward as how to make the school more friendly such as adding more greenery to the school. They viewed this as regarding both to enhancing the appearance and also instructing students on how to take care of the environment. Prity proposed that the school compound and its surrounding should have more trees and greenery established. An environmental healthier school will enable children to have a stronger connection with nature.

Apparently, preschool teachers desire environmental education to be more activity based and interrelate various subjects. They advocate the idea of a regular eco-activities rather than only organizing a few events, and promoting children to participate in waste sorting and other activities and include more environmentally friendly materials in their schools. The teachers desire to engage the students in environmental friendly activities using fun and engaging methods and give them a more interesting and valuable experience on the environmental education.

CHAPTER V
DISCUSSION

This study of a preschool highlights how variations in practice have led to success, but also point out several areas in need of attention. On one hand, teachers in the study showed much dedication, creativity and eagerness to help children become more aware of the environment by letting them participating in new activities, gardening, reading and doing regular chores in the class. Children also displayed observable behaviour changes, taking responsibility for plants, waste disposal and guiding their friends. Activities combined experiential, play based and collaborative learning helping in developing cognitive, emotional and social development of children.

Despite the positive practices by teachers, various challenges like limited green space, lack of formal training in environmental education of teachers, absence of structured curriculum, insufficient parental support create challenges in consistent and deep implemetation. The activities implemented were usually personal actions , improvisation and culturally grounded practices to deliver environmental education.

Understanding Teachers' Perspective on Eco-Friendly Practices in Preschool

The preschool teachers in Kathmandu Valley view eco-friendly practices crucial during early years of child development. Most of the teachers agreed that early childhood, is where children set the groundwork for values, attitudes, and behaviors with regards to the environment. It connects with psychosocial theory by Erikson, who says that between the years three to six, children are highly capable of planning and executing them. This capacity for purposeful action fosters their sense of initiative but if criticized and discouraged, can result in guilt (Hurrell & Stack, 2017). Children's sense of curiosity and responsibility can be developed by engaging students in motivating activities like eco-friendly activities. Teachers' awareness on importance of preschool for children matches with global research, which emphasize that the preschool age period is an ideal time to begin educating children about environmental issues because children also share a special curiosity and empathy for nature (Gulay, 2011). Similarly, Braus (n.d.) argues that environmental learning in

early stage of childhood is important for developing environmental stewardship, especially when adults are supporting the effort. Early environmental education help in development of an ecological identity in children. The feeling of being connected with nature which results in long-term environmental behaviors (Ardoin and Bowers, 2020). It demonstrate the view of the teachers in the study expressing the belief, thus, environmental values taught at this level can lead to the production of responsible citizens in the future.

However, the research also indicates that teacher's understanding of environmental educational is often understood in very narrow terms and behaviorally oriented. Teachers focused on short and concrete activities such as keeping the classroom clean, disposing of waste in an appropriate manner, not littering, washing hands, watering plants, or personal hygiene. These actions sure have a place in terms of environmental education that are suitable for such young children, but they offer only a very superficial engagement. The focus was mostly on individual behavior or following rules rather than engaging in critical thinking or collaborative action.

While theses actions are important, they reflect management oriented approach by Bailie (2012). It emphasize that children are trained in environmentally responsible behaviors but don't think about why these behaviors matter and the ways in which these behaviors relate to environmental systems. Choices like these are used to develop routines and social norms which might not help in critical thinking about ecological interconnection. Early childhood educators in several developing contexts tended to confuse environmental education with simple ideas about cleanliness and moral discipline due to a lack of professional training and conceptual clarity (Aghakouchak et al., 2020). It mean that many teachers do their best with limited resources and knowledge and may not be aware to the broader area of sustainability education.

The teachers' understanding also points toward the obvious absence of systemic integration of eco-friendly in early childhood teacher preparation programs. Most teacher education curricula in Nepal, and elsewhere in the Global South, do not carry modules or strategies on eco-friendly practices (Kogan, 2025). The optimistic attitudes and continuous motivation of teachers present a good picture but there is need for teacher education and professional development programs.It will provide

more transformational knowledge to teachers, instead of stopping at their practical expertise.

Pedagogical Approaches in Eco-friendly Practices

Teacher apply play based and experiential pedagogies to introduce environmental concepts to children. Children actively construct knowledge through interaction with their environment (Piaget, 1964) so activities like planting, watering, caring for plant, observing the growth allow them to engage directly with their environment. These activities are interactive and enjoyable experience for children. It also helps them to connect their actions to outcomes. Developmentally appropriate practice (DAP) states hands on activities, play, inquiry based learning as core strategies for early childhood education (NAEYC, 2009). The teachers planned age appropriate activities for their foundation, junior and senior kindergarten students. Younger children were involved in simple activities whereas older ones in little complex activities which shows progressive scaffolding in environmental learning.

Storytelling also was used to introduce complex environmental concepts in simplified form to students. Teachers integrated narratives about animals, plants and sustainability into classroom activities. Language and social interaction plays and important role in cognitive development of children stated in Vygotsky's social constructive theory (Wibowo, 2025). Children internalize environmental values and develop empathy for living beings through stories. This shows how narrative pedagogy helps in moral reasoning and environmental consciousness in children. The storytelling and environmental narratives helps to increase empathy, cooperation and environmental responsibility among children in preschool setting. (Mahat et al. 2019; Sharma et al. 2022).

Role play and dramatization were also widely used to strengthen eco friendly behaviours. Children play role as trees, taps, family members, community helpers and which help them to explore environmental concepts through embodied experience. Individuals learn by imitating and observing others behaviour especially their friends or role models as suggested by Bandura's social learning theory (Bagona et al., 2024). Children could internalize eco friendly practices like managing waste properly, conserving water, etc by observing , imitating and receiving reinforcement from teachers and friends. Role play also helps in socio-emotional development. Children have to collaborate with friends, negotiate the roles and express emotions appropriate

for the drama. These activities help in holistic learning and develop interpersonal skills, empathy and self regulation along with gaining knowledge.

Art and craft activities using natural and recycled materials were also important part of eco friendly practices. Children created crafts from natural materials like leaves, twigs, seeds, pebbles and waste materials like plastic bottle caps, waste paper, old pens etc. It increases creativity, fine motor skills and resourcefulness along with awareness of waste management and mindful consumption. These type of hands on learning foster pro environmental attitudes (Ojala, 2015). These activities also develop cognitive skills like sorting, pattern recognition, problem solving etc. It integrates environmental and academic learning in children.

Field visits provide opportunity of experiential learning which goes beyond the classroom setting to children. Teachers mentioned that field visits help children to observe human and nature interactions along with environmental condition in community and connect classroom knowledge to real life scenario. It shows how learning is a cyclical process which involves concrete experiences, reflective observation and active participation (Mechouat, 2024). Community based experience like paddy plantation strengthen children's understanding of cultural and ecological linkage.

The observations of this research are in perfect accord with Dewey's theory of experiential learning. His idea is that meaningful understanding originates from direct experience and subsequent contemplation rather than from passive instruction (Dewey, 1938). The preschool teachers who were part of the study organized the learning process in such a way that the children were exposed to nature very actively through gardening, waste management, and direct exploration. All these activities gave the children real opportunities to observe, do experiments, and be responsible for living things. As one teacher mentioned, "When children plant seeds and water them every day, they feel proud watching them grow, it teaches care and patience." Such a scenario corresponds to Dewey's concept of learning taking place in the most effective manner when the learners are actively participating in meaningful activities linked to their surroundings. Moreover, these experiences contributed not only to children's cognitive and psychomotor development but also to the establishment of emotional attachment and respect for nature.

However, it was revealed in the finding that some of these practices do promote environmental objectives and are short-term in approach, seemingly many of these activities were occasional or conducted only during special occasions. The teachers said activities like these were mostly seen as one-off acts and not sustained or implemented with a day-to-day approach. For example, planting saplings may be a major event; however, the proper care and the education derived from those plants usually take a back seat. In case the concepts of environment were introduced to kids as special days comprising partly secluded activities, moreover, they were not very much a part of their everyday life, then what probably would happen would be a thin layer of superficial learning. Later on, kids would link environmental care with the special days and not as a continuous duty or a part of their character traits.

The curriculum lacks a clear or gradual progression in the introduction of environmental topics. It prevents children from having the opportunity to reflect and think deeper as they get older. While a three-year-old might be taught to identify or water a tree, a five-year-old could be made to understand the tree's role in the ecosystem. So, environmental education often becomes repetitive without such developmental sequence which draws attention to the same simple activities with little connection to broader topics.

Many educators also stated that they often take a spontaneous approach to planning and have no strict guidelines or learning outcomes for eco-friendly activities. This condition indicates that teachers are not given much support by the system to create effective learning. Hence, there is a clear disparity between planned and spontaneous learning in preschool classrooms.

If we want to see real and permanent changes in the environment, then we must have environmental education everywhere in the teaching and learning process and not something done occasionally. This calls for the collaboration of curriculum developers, school heads, and teacher trainers to come up with unambiguous frameworks and suitable learning goals for different age groups in environmental education. The teaching professionals will also require assistance in the areas of class planning and the use of different methods to evaluate the learning of children in this domain. Furthermore, environmentally friendly practices should be part of the daily classroom routines and should be integrated into various subjects such as math, language arts, and art. When environmental education is planned with intention and

incorporated into the curriculum in a significant way, it can be very strong factor in building up a permanent consciousness of and care for the environment and in children's forming of responsible habits.

Children's Developmental Outcomes

Cognitive development has been developed through participation in eco-friendly activities. The children showed to be more capable in the fields to see, to solve problems, to classify, and to reason. Waste sorting and recycling crafts demanded making choices and applying critical thinking. These cogntive skills are basic for everybody's environmental literacy skills in the long run. The nature and sustainability education taught to kids early in life would lead to their life-long environmental engagement over time (Chawla, 1999). Children were also able to refine their fine and gross motor skills through practical activities such as watering plants, sorting materials, and handling art materials. All these activities were very supportive of the development of the skill for control over one's body in terms of coordination, hand-eye control. At this stage, the development of psychomotor skills is very important for independent exploration and active learning, which are the main principles of Montessori pedagogy (Lillard, 2011).

Eco-friendly practices helped to develop children's social and emotional skills. It is the main reasons for teamwork, understanding and communicating with each other. Planting and crafting in a group led to taking turns, sharing and working together in solving problems. Participation in role playing and narrating stories made children's emotional literacy more powerful, thus making them able to express their feelings, see things from other people's points of view and even more their understanding of animals and plants. The social-emotional skills that were developed through environmental education are also the ones that make children more resilient and adaptive as compared to their peers (Denham et al., 2012).

Teachers noticed the emergence of moral reasoning in the children's environmental behavior. The children reminded their friends about the correct way of disposing the waste, showed concern for animals and plants, and exhibited the knowledge of the community's rules that support sustainability. All these actions represent the initial formation of ecological ethics and moral judgment which is in line with Erikson's psychosocial theory. As per Erikson, children in "initiatives vs.

guilt" stage (3-5 years) will be influenced by a feeling of purpose and accountability if they are allowed to participate in socially meaningful activities (McLeod, 2025).

The results have been consistent with the goals of preschool education, which are primarily concerned with the holistic development of the child. Eco-friendly activities, proved to be very helpful for the children. Along with the development of their social and emotional capacities, they learned how to share, help, and be kind to both plants and the environment in the classroom. The children, while telling stories or explaining cleanliness rules in the classroom, were using the new environmental terms they had learned which were contributing to their language skills. They gradually start to show moral understanding by differentiating what is right and wrong in environmental matters. They even conclude that throwing garbage on the street is not an appropriate act.

These findings are very encouraging but it is still an open question how long the children will keep the lessons in memory and how long they will be able to understand them without regular practice and support. Moreover, kids had hardly any opportunities to go back to their learning, for example, by keeping a little journal, drawing pictures, or talking with the teacher about their experiences. True environmental understanding for young children implies more than just doing simple things. It means making them feel accountable for and in communion with the earth. Two-way communication with the children is very important, not just as recipients of knowledge but also as those who actively participate and help in the care of the environment.

Teacher Training and Professional Development

The study uncovered the important role of educators in facilitating eco-friendly practices. As the ones who organize and conduct the various activities, they also set by example showing how to act sustainably. Moreover, they contribute significantly to children's engagement and learning through their energy, creativity, and commitment. The teacher's attitude, knowledge, and their style of teaching are critical factors for successful environmental education in early childhood (Ernst & Theimer, 2011).

Teachers as facilitator, need to know the correct ways to carry out eco-friendly practices. In the interviews conducted with the six teachers, it was revealed that none of them had ever participated in any kind of formal training regarding application of

eco-friendly practices into teaching. Most of the teachers used their own experience, online sources, and informal consultation with peers in order to make the idea and use eco friendly activities. They are energetic and creative, and their productivity could be significantly increased with more institutional assistance and professional training (Ardoin & Bowers, 2020)

Many teachers perceive themselves as unprepared to convert the transformation of the environmental goals into meaningful classroom activities and this is mostly at the early childhood level where eco-friendly practices are quite uncommon in pre-service programs or instructional textbooks. Lack of appropriate teacher training has often been cited as the hindrance of the introduction of effective eco-friendly practices especially at the Southern hemisphere (Zhang et al., 2025).In this research, the teachers pointed out that there is a need for external help as well as for the provision of learning experiences in order for them to be able to virtually strengthen their understanding of environmental concepts and how to teach them. A few of them mentioned that they would be more productive if they were given good examples of lesson plans and clear techniques for imparting knowledge on environmental issues (Ardoin & Bowers, 2020). Whenever teachers are confident and sure of what they are doing, they will be capable of applying the most advanced methods, and introducing the eco-friendly habits in their classroom. Professional development increases, teacher's content knowledge, know how to make difficult subject matter easy and interesting to children. Teachers using eco-friendly practices in the preschool sector should learn how to make the ideas of "sustainability" or "biodiversity" very close to the children's world through exciting methods like storytelling and playing. Still, the number of educators who hold such knowledge is very limited, which indicates the big loophole between environmental consciousness and teaching skills (Schmitt, 2023; Veliz, 2025).

The environment-friendly practices are not limited to one time actions because they are undergoing change and are through continuous process and have impact on many areas. The continuous professional development (CPD) framework will help in early childhood education sector. The educators will be supported by workshops on planning and evaluation of the eco-friendly activities, awareness of international models on sustainability education of the preschoolers, networking of teachers or eco-clubs. (Fisher et al., 2022; Davis, 2009).

Gaps in policies and institutions also exist. The Nepal Education Policy (2019) and the Environment Protection Act (2019) recognize environmental education, but early childhood teachers' training is not facilitated. Thus, there is a gap between national laws and practices in the classroom. To avoid this, the Ministry of Education, Science and Technology, Curriculum Development Centre, and teacher training institutions should come together to incorporate eco-friendly modules and make CPD sessions on eco friendly practice regular and mandatory. It should create training materials that suit the context and collaborate with environmental organizations like the National Trust for Nature Conservation and Friends of the Zoo (FoZ).

If they do so, then eco-friendly practices will be a system-supported component of early childhood education rather than the teachers' optional choice. Though teachers would like to integrate eco-friendly practices, they are unable to do so due to lack of training, confidence, and institutional support. Professional development investment is essential not only in terms of educational quality but also in the long run for the environment sustainability (Aghakouchak et al., 2020; Fisher et al., 2022).

Unexpected Observation

Some of the findings of the research were unexpected. Children, even without teachers' reminder, sometimes helped one another to take care of the plants or to litter in the right bin. This indicates that even young kids are capable of taking responsibility and can learn through peer interaction.

Besides that, how children interacted with mud play and outdoor activities was another surprise. Some of them loved the idea of planting paddy and playing in the mud whereas some were scared to enter in the field. Teaching has to be so skillful as to differ with everyone's comfort zone and home environment. Moreover, it seems that feelings and family habits might influence the participation of children in environment-related activities.

CHAPTER VI
CONCLUSION, IMPLICATION AND REFLECTION

Conclusion

This study has examined the concept of green practices in early childhood education using case study of a preschool in Kathmandu Valley. One of the main focuses of this research was on the perspectives, and understanding and practices of six preschool teachers. The findings indicated that the preschool teachers perceived the use of eco-friendly classrooms as a place that helps foster the comprehensive development of child not only in environmental awareness. The mentioned teachers said that the green classrooms were natural material and recycled, offered outdoor learning, and helped the children in their day-to-day life by practicing sustainable habits. They considered the classroom as a place of learning rather than a place of physical being. It was a home-like environment of nature, simplicity, and consciousness on use of resources. The teachers mentioned that exposure to nature should begin with the children as early as possible and proposed such activities as gardening, planting seeds and observing natural processes which would not only take children to nature but also make them curious and respectful that is, to nature.

A teacher describe her class as a small version of the world we wish for children to live in, which means that kids are educated to keep waste separated, are given the care of plants, and are allowed to make and play with reused materials. This was the main reason behind the non-verbal forms of sustainable behaviors being linked with the children's learning through imitation and participation. Teachers saw their position as facilitators who lead students in their exploration and interaction with the environment allowing them to grasp the concept of sustainability through doing rather than teaching.

Eco-friendly activities were gradually introduced into different areas of child's daily life. The teachers proposed scientific and playful learning experiences that allowed the environmental values to be the actual part of the classroom's daily life. Some of the activities were the use of waste as art materials, nature walk for kindergarteners, and the prohibition of plastic or artificial teaching aids by using the

local natural resources around. Gardening was one of the most popular eco-friendly activities among the kids since it allowed the kids to witness the process of growth, participate in the caring activities and feel ownership of the plants. Moreover, the children got an opportunity to learn the environment through storytelling and singing involving plants, animals and seasons which was a fun method.

The stories told by the teachers indicated that teaching eco-friendly practices was not a subject, but a way of living every day in disguise. The switching off of the lights while leaving, the saving of water and cleaning classrooms were transformed into classroom transitions, snack times and clean-ups respectively. Through these repetitive activities the teachers wanted to instill care and responsibility habits together with the environmental knowledge. They believed that repetition and modeling were the most effective ways to acquire eco-friendly behaviors in very young children.

The study shows the impressive commitment and creativity of teachers, and also limitations that eco-friendly practices can only go so far. Teachers who were under the pressure of the academic schedule and had no support in environmental education, often pointed out that there were not enough resources. The majority of the teachers were drawing mainly from their own experiences combined with informal interactions with colleagues as the basis for developing eco-friendly activities. The early childhood education curriculum did not specify environmental education which obliged the teachers to be very creative in adapting the existing materials. Nevertheless, it was a common conviction among the participants that early childhood education is the ideal time for the formation of environmental consciousness and the sustainable behavior of a lifetime.

The eco-friendly practices in preschools are gradually and undoubtedly taking place through the teachers' commitment, innovations, and sensitivity to the context rather than through formal orders. Teachers' practices were a mix of natural concerns for the environment and pedagogical adaptations. As long as teachers are motivated, reflective and flexible, their classrooms showed that sustainability could still be meaningfully integrated even though there were limited resources.

The research was conducted in Nepal, and the results obtained articulated the absence of both the systemic and structural support as the barrier to the sustainability as well as the possible upscaling of the early childhood environmental education in

Nepal. Though national policies endorse environmental education and align with sustainabe development goals, these commitments are yet to be properly implemeted. Various barriers were identified. First of all, the absence of formal training and professional development in environmental education for teachers leads to the teachers having very little knowledge of the subject and teaching in an uncoordinated manner. Curriculum integration is still a matter of isolation and it is not even hence, environmental ideas being the last or extra ones are often considered as the very beginning of early learning. Due to poor infrastructure, the lack of green areas and the non-availability of appropriate teaching materials. Besides, the low level of parents' involvement causes a reduction in the connection between home and school, and as a result, the environmental learning is inconsistent in both contexts. Lastly, the ongoing separation of national education policies from grassroots implementation makes it hard to come up with a clear guiding signal in terms of practices and institutional support that is consistent, which in turn, limits the impact of environmental education at the early childhood stage.

These barriers create problem for the nations of world in the process of incorporating sustainability into early childhood education in developed countries (Aghakouchak et al., 2020; Sisitka et al., 2017). If eco-friendly practices are not targeted stragetgically throuh system, it will permanently remain outside the core educational system.

Implication

This research has given an abundance of insights to the future of early childhood education and eco-friendly practices. At the same time turning of eco-friendly education in kindergartens from a variety of spontaneous and disconnected activities to a continuous and significant approach would require the cooperation of all teachers, curriculum developers, policymakers, parents, and community members. Teachers were eager and personally motivated to include eco-friendly practices but the study revealed that they lacked institutional support, clear direction, and enough resources. Thus, making early childhood programs greener will need deliberate steps that involve the entire education system.

Implication for Teachers

In the formative years, the educators are the most significant influences on a child’s ecological values and behaviors. Research indicates that the preschool teachers

predominantly relied on their personal experience and artistic imagination rather than on institutional support or formal training. This deduction agrees with Davis (2015), who claims that child educators are vital contributors to the sustainability circle but are, at the same time, often unsupported by adequate professional preparation. Teachers should not limit their eco-friendly practice to a few occasions like Earth Day but rather incorporate it into their daily school lives. There are very simple and repetitive activities like trash separation, plant watering, classroom cleaning, and weather observing that can make children regard eco-friendly activities as regular parts of their daily lives. It is the formation of an environmental habitus, where the values of care, respect, and responsibility are genuinely reinforced through practice (Chawla and Cushing, 2007).

Teachers are expected to put the child in a position of active involvement in the learning process, not merely as information recipients who receive passively. It can be said that children learn the best through social interaction and being involved in the learning process through cooperative searching. It is allowing children to take different kinds of initiatives such as planning how they can reduce waste, making art from recyclable things, or designing posters for the class about hygiene that gives them agency and enhances problem solving skills that are connected to sustainability. To make it more attractive, the teacher can add his/her own ideas and energy through storytelling, singing, puppet shows, and visual aids as they are teaching. The North American Association for Environmental Education (NAAEE, 2016) confirms that the use of creative and artistic media promotes children's understanding of environmental concepts and emotional connection with the natural world.

Implication for Policymaker and Institutions

It is necessary for eco-friendly education in preschools to have a policy-level commitment and institutional support for their long-term development. In Nepal, despite environmental consciousness being part of national policy documents, the implementation of it in the early years is still very limited. This situation requires better partner relationships between the policymakers and the teachers. One of the main policy suggestions is to incorporate eco-friendly education into the teacher training programs. The victory of environmental and sustainability education is dependent on the quality of teachers, who not only have the knowledge but also the teaching skills (Davis, 2015). Thus, teacher training for both new recruits and existing

teachers in early childhood education should have modules that deal with topics such as environmental literacy, child-centered sustainability approaches, and local ecological issues.

Professional development is only one area of investment in education, the infrastructure of schools also plays a major role. The lack of natural outdoor spaces in many urban preschools in Nepal has significantly reduced children's chances of learning about the environment through direct experience. Creation of small scale green learning spaces in schools can be supported by policymakers and local authorities. Eco-friendly programs can be a powerful movement with the combined effort of schools, local governments, NGOs, and parents. Such collaborations will develop a shared feeling of being responsible for caring for the environment. It will also allow in sharing of resources, community clean-up drives organization, or school sustainability projects implementation.

Implications for Parents and Communities

The research revealed that the majority of the parents were unaware of and not involved in the eco-friendly learning activities of their children at school to the full extent. But it has been stated that eco-friendly habits of kids will is persistence if and only if they are both school and home supported (Somerville & Williams, 2015). So, it is important that parents live a life where sustainability is the main theme and drawing the line of action with everyday activities like water saving, plastic cutting or household items reuse etc. These small steps will not only the children observe but also practice the sustainable living and thus will reinforce the school-home bond in environmental teaching.

Active involvement of parents in eco-friendly activities organized at school not only helps children learn, but the learning outcomes are also high in such cases. Parents could be involved in events like planting days, eco-fairs, family nature walks, recycling projects,etc. Participation in these events creates a sense of shared ownership and makes parents see the importance of early environmental awareness. In addition, storytelling sessions or creative art projects jointly conducted by parents and children can strongly bind kids to nature emotionally (NAAEE, 2016). When families and schools cooperate, the impact of eco-friendly education becomes more powerful, consistent, and meaningful which leads to behavioral change among the young learners that lasts longer.

Implications for Curriculum Developer

Curriculum design is the cornerstone that enables and makes eco-friendly education in preschools official. Environmental concepts in Nepal's Early Childhood Development (ECD) curriculum are presently scattered and thus often treated as an add-on rather than being the primary concern. Consequently, the justification for such curriculum fragmentation is a lack of coherence and a comprehensive approach. The curriculum should not only highlight but also specify the outcomes related to environment and sustainability learning through competencies suitable for the age group and impactful like caring for plants and animals, waste reduction and local ecosystem understanding. At the same time there will be clear indicators of eco-friendly behavior which will support teachers in planning and assessing the learning more easily and effectively (Elliott, 2014).

Incorporating multidisciplinary approaches in the curriculum will also require that the teaching materials and activities reflect Nepal's unique culture and environment. The use of local examples like traditional water conservation methods, local plants and animals, or nature-related festivals can make eco- friendly education more appealing and accessible (Pramling & Kaga, 2008). To infants, the educator will use sensory activities and observations; to preschoolers, the educator will use discussions about causation, like why trees are vital for clean air, and so on. The age-appropriate sequencing not only helps establish a very strong environmental understanding and a positive attitude that will last even after the children go out of preschool but it also helps the teacher as well (Davis, 2009).

Reflection

The collective effort of everyone involved is what will make it possible to bring eco-friendly and environmental teaching to early childhood. This is a result of the united commitment of teachers, curriculum developers, policymakers, parents, and researchers. Each of them are very important in helping the young children to both, learn about the environment and start to care for it and act responsibly towards it.

This research has been a very reflective and meaningful journey for me. The study started with me as a graduate student and an early childhood teacher and I was a beginner researcher wondering how environmental education is actually practiced with the youngest kids. My academic journey turned into a personal exploration of how education impact thinking, values, and future actions.

The study afforded me the opportunity to gather knowledge from six enthusiastic preschool teachers employed in a Montessori based preschool in Kathmandu Valley. Their effort and creativity are powerful motivators. Despite the lack of formal training or structured support, they discovered teaching children about nature in a simple and efficient way. They employed recycled products as teaching aids, fostered a culture of respect for life's little ones, and made conscious efforts to incorporate eco-friendly practices into didactic activities. Their minor but well-considered deeds indicated that significant changes very often come from the classroom rather than through the implementation of large policies.

What hit the most in my experience is that the environmental education is a gradual process starting with the simplest and most child-friendly activities like sorting the waste, watering a plant, and keeping the classroom clean. At first sight, these moments might appear trivial, but they gradually build the child’s awareness, good feelings, and responsibility towards the nature. I learned that the period of early childhood is not too early to start such education, on the contrary, it is the best time to cultivate the lifelong values of care and respect for nature.

The research further indicated a distinct void between the environmental education policies and their implementation in the classroom. While documents like the Sustainable Development Goals and the national policies of Nepal point out the significance of environmental sustainability, the reality in early childhood education is that often there is a lack of guidance and support. The role of early childhood education in the area of promoting environmental responsibility is still underestimated.

The perception of my role as a teacher has changed after this experience . I now consider it a participant role in the collective effort to make environmental education available in schools. It is my view that children learn about the environment not only in class; the process should be extended to their homes, at the playgrounds, in teacher training and in the community. It should give a nature based lifestyle to children, developing such fascination and knowledge as a daily part of their living, exploring, and learning.

To be honest, this inquiry facilitated my growth as an educator and researcher. Above all, it clarified my view that early childhood education both leads to primary school and to life o n a shared and fragile planet. Eco-education for young children is

not merely supplying knowledge, it is also the worthwhile goodness of fostering empathy, responsibility, and love for the environment.

I would like to consider this research one of the contributions to the current discussion on how to make education more sustainable, more inclusive, and more child-centered. I can imagine the situation when children do not only know the world but they also have the heart to take care of it and understand their place in it. I am drawing a close to this research experience, I am reminded that the actual change begins at very early age, the change will be lead by teachers, provided they are the right players. The children that we are educating today are not just the future citizens, but also the current world guardians. One of the best tasks of our teachers is to make the kids love nature and know how to take care of it.

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