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# Trajectory of reflective practices of pre-service teachers: A qualitative case study



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# **ABSTRACT**

This study examines the reflective practices of five pre-service teachers from the 2024-25 cohort enrolled in the Bachelor of Elementary Education (B.El.Ed) programme. The purpose of this study is to gain an in-depth understanding of how reflective practices are developed and enacted within the elementary teacher education programme. This is a qualitative case study that utilizes semi-structured interviews and analyses 200 reflective notes from journals maintained by five pre-service teachers, each contributing 40 entries. The reflective notes were analysed inductively using a framework to evaluate the breadth and depth of reflection. Semi-structured interviews reveal rich insights into the participants' perspectives and conceptual understanding of reflective practices. Through thematic analysis, this study identifies trajectories and transformative aspects of reflective practices in the teacher preparation process, providing a foundation for understanding the evolution of pre-service teachers as reflective practitioners. This evolution ranges from descriptive to dialogic and critical reflection. The findings highlight the progressive development of reflective thinking, influenced by the participants' contextual background, classroom experiences, and active involvement with pedagogical practices. To foster pre-service teachers' reflective capacities, the study emphasizes the need for structured support and training in teacher education programmes. Consequently, it will improve the quality and effectiveness of teacher education programmes.

**Contribution/ Originality:** This study distinctly examines the longitudinal evolution of reflection among preservice teachers in the Indian context, utilizing reflective journals and interviews to illustrate reflection as a dynamic, developmental process. An approach rarely used to link reflective trajectories with curriculum design and mentoring in teacher education.

# 1. INTRODUCTION

Reflective thinking is an indispensable aspect of a teacher's professional life, making them decision makers and problem solvers in complex classroom environments with competing demands [1]. Reflective practice entails a purposeful examination of one's own experiences to derive insight and learning. Thus, it makes it a deliberative and active process, Dewey [2] and Russell [3]. Clark [4] suggested that learning to be a good teacher results from conscious reflection on events, training, experiences, readings and other contextual contributions. Reflective thinking enables educators to critically evaluate their beliefs, ideologies, actions, and pedagogical strategies, thereby fostering professional growth. It encourages a deeper understanding of teaching contexts and helps align practice with meaningful learning objectives.

The importance of reflective practice in teacher education is widely accepted. However, it is important to note that research on the development of reflective capacities among pre-service teachers remains limited. Existing literature tends to capture reflective practices as a one-time event rather than a developmental process. Teacher education programmes like B.El.Ed focus both on disciplinary knowledge and pedagogical engagement. However, in the Indian context, systematic research into the evolution of reflection remains underexplored.

This study addresses this gap by presenting a longitudinal qualitative case study of the reflective journeys of preservice teachers in the B.El.Ed programme. Through analysis of their reflective journals, this study explores their perceptions, levels of engagement, and the nature of their reflection to highlight how reflective thinking contributes to their development as effective and thoughtful practitioners.

This study is unique in three distinct ways. First, it is a longitudinal qualitative case study to track the trajectory of reflective practices among pre-service teachers. Existing literature frequently focuses on one-time reflections rather than on longitudinal studies. Second, it develops context-specific insights into the evolution of reflection during the preparation of teachers by fusing the conceptual framework of reflective practice with the reflective journals of participants. Third, the study offers new insights into curriculum design and teacher mentoring. This is noteworthy in the Indian context of teacher education, where there is still a dearth of empirical evidence on reflective practices. Thus, this paper highlights implications for promoting reflective dispositions in pre-service teacher education, expands theoretical discussions on reflective practice, and provides methodological possibilities for capturing reflection as a developmental process.

#### 1.1 Literature

Richardson [5] asserted that "we have shifted our concept of teaching from one that suggests teaching as exhibiting a set of behaviours toward one that views teaching as requiring complex thought and decision-making within situations of uncertainty and diverse contexts" (p. 151). Teaching is a complex activity that requires decision-making skills daily. Reflective practices help in understanding teaching practice and the nature of classrooms. Hole and McEntee [6] stated that reflecting on the ordinary experiences of a teaching day is the life force of teaching practice. Here, reflective practices play a prominent role. Various terms, such as 'reflective practice,' 'inquiry-oriented teacher education,' and 'teacher as problem-solver,' describe reflection with differing conceptual nuances [7]. Dewey [2] defines reflection as active, careful consideration of beliefs to guide thoughtful action, while Boud, et al. [8] see it as evaluating experiences to generate new understanding. Rodgers [9] has provided four criteria of reflection, considering the work of Dewey:

- Reflection is a meaning-making process.
- It is a systematic and disciplined way of thinking.
- It needs to happen in interaction with other people.
- It requires awareness of the attitudes that value one's own personal and intellectual growth as well as that of others.

Thus, it can be seen that reflection is a structured and thoughtful process of making meaning from experiences. Schön [10] distinguishes reflection-in-action (thinking during activity) from reflection-on-action (thinking after the event) to improve future practices. Similarly, Van Manen [11] (as cited in Cimer, et al. [12]) defines reflection-in-action as an active or interactive reflection that 'allows us to come to terms with the situation or problem with which we are immediately confronted. This stop-and-think type of reflection permits us to make decisions virtually on the spur of the moment' (p. 512). Two dominant perspectives that have shaped the field are as follows:

1. Cyclical Process [13, 14]—Reflection involves ongoing cycles of problem-solving and self-appraisal, moving from routine to reflective actions characterized by open-mindedness, responsibility, and wholeheartedness. Dewey's five phases of reflection suggestion, intellectualization, hypothesis, reasoning, and testing highlight reflective thinking as a systematic, meaning-making process connected to practical teaching dilemmas.

2. Hierarchical Process [11] mentions that reflection occurs at three levels—technical (effective skill use), practical (interpreting assumptions and consequences), and critical (ethical, moral, and social justice concerns). This framework underpins many models emphasizing growth from technical competence to critical awareness in teaching.

Complementing these, Zeichner and Liston [15] further categorize reflection into academic, social efficiency, developmentalist, and social reconstructionist types, ranging from content focus to addressing societal issues in education (as cited in Pollard [16]). In addition to this, Hatton and Smith [17] mention four levels of reflective writing: Descriptive writing (Narration of events), descriptive reflection (Reasoning with justification), dialogic reflection (Exploring alternatives and multiple perspectives), and critical reflection (Questioning underlying assumptions and sociocultural contexts). This framework is extensively used in empirical studies to analyze the quality and depth of reflective journals of pre-service teachers. Similarly, Ward and McCotter [18] work mentions the progression of reflection from routine to technical, dialogic, and transformative reflection. It focuses not only on the depth but also on the teacher's stance toward inquiry, responsibility, and social justice.

Collectively, these theoretical perspectives describe reflection as multidimensional (technical, practical, critical) and developmental (cyclical and hierarchical), with effects on teacher learning and identity. They also have direct implications for the current study, and Dewey [13] and Boud et al. [8] views provided insights into the exploration of pre-service teachers' perceptions of reflection. Schön [10], Van Manen [11], Hatton and Smith [17], and Ward and McCotter [18] analytical frameworks offer insights into assessing the depth and nature of reflection. However, Hatton and Smith [17] and Ward and McCotter [18] frameworks are employed to identify levels of reflection in participants' writings. Dewey's cyclical notion and Pollard and Triggs [14] views on progression emphasise the importance of longitudinal studies in capturing reflection as a trajectory. Harvey, et al. [19] also emphasise that contemporary research needs to focus on strong theoretical grounding, robust and diverse research methodologies, including large-scale and longitudinal designs. This perspective highlights that the research on reflective practices is dynamic in nature.

# Method

This qualitative case study explores reflective practices in elementary teacher education by analyzing 40 reflective notes per pre-service teacher and interview responses from five participants during their school internship programme.

# 1.2 Research Questions

The study aimed to understand the evolution of pre-service teachers as reflective practitioners during their school internship programme. The following research questions guided this study:

- Q1) How do pre-service teachers conceptualize reflective practices during their teacher education programme?
- Q2) What are the key areas and issues that pre-service teachers focus on in their reflective notes?
- Q3) What levels of reflection (Descriptive writing, Descriptive reflection, Dialogic reflection, Critical reflection) are evident in the reflective writings of pre-service teachers?

#### 1.3 Institutional and Programme Context

The study was conducted at Shyama Prasad Mukherji College for Women, a prestigious women's college affiliated with the University of Delhi, India. It offers undergraduate and postgraduate courses related to teacher education, including B.Ed. (Bachelor of Education), B.El.Ed. (Bachelor of Elementary Education), and ITEP (Integrated Teacher Education Programme). The four-year B.El.Ed. programme prepares students to teach elementary-level classes. Five final-year B.El.Ed. students' reflective journals were selected based on availability and willingness. Researchers maintained ongoing interaction with these students and conducted semi-structured interviews. The students

completed a 40-day 'School Internship Programme,' applying theoretical and pedagogical knowledge in primary schools, where they were required to maintain daily reflective journals documenting their teaching experiences.

# 1.5. Participants' Profile

Five final-year pre-service teachers from the B.El.Ed. programme of the session 2024-25 participated in the study. They were selected based on their availability and willingness to share their reflective journals. Ethical measures, including informed consent and confidentiality, were strictly observed. Table 1 presents the total number of reflective notes analysed for this study. Each of the five pre-service teachers Naina, Chesta, Pooja, Sonia, and Nisha contributed 40 reflective entries, resulting in a total of 200 reflective notes.

Table 1. Total count of reflective notes from different participants.

Pre-service teachers'	No. of reflective notes undertaken for the study
Naina	40
Chesta	40
Pooja	40
Sonia	40
Nisha	40
Total	200 reflective notes

Semi-structured interviews were designed and conducted to supplement the analysis of the journal and explore participants' conceptual understanding and growth as reflective practitioners.

#### 1.6. Data Sources

- Reflective Notes: The study used 200 daily written reflections from five 4th-year B.El.Ed pre-service teachers to examine their growth as reflective practitioners during their internship.
- Semi-Structured Interviews: Individual semi-structured interviews were conducted with the five pre-service teachers whose journals were analyzed. These interviews were scheduled based on the availability of preservice teachers, which allowed exploration of participants' perspectives and experiences with reflective writing.

#### 1.7. Data Analysis

- Coding of Reflective Notes: The first phase of data analysis involved reading and rereading each reflection line-by-line four times, following an inductive approach. The researchers conducted open coding, where significant statements, events, and expressions were assigned preliminary codes. Each note was coded at the level of reflection (e.g., Descriptive Writing, Descriptive Reflection, Dialogic Reflection, and Critical Reflection) and dimension (Area of Concern, Inquiry, or Change). These codes were then collated into broader categories, allowing thematic categories to emerge from the data itself. The researchers built the themes from the bottom up by organizing the data into more abstract units of information. They iteratively worked between the themes and the reflective journal until a comprehensive set of themes was established. The analysis of reflective notes was guided by a framework developed by the researchers, based on the theoretical constructs by Hatton and Smith [17] and Ward and McCotter [18].
- Interview Analysis: Interview transcripts were examined for emerging patterns, recurring themes, and unexpected insights to complement and deepen the understanding derived from reflective notes.
- Trustworthiness and Reliability: To ensure the rigor of the study, the researchers employed multiple strategies.
  - ✓ Triangulation: Multiple data sources, such as reflective notes and interviews, were used to support findings.

    These sources are complementary and come from different methods. Reflective notes are written accounts

of practices, while interviews are narratives gathered by researchers. Combining written and verbal accounts enabled cross-validation of emerging themes. This process helped in developing a nuanced understanding of reflective practice.

- ✓ Peer debriefing: To reduce individual bias, both authors independently cross-checked the coding. Any differing interpretations were carefully discussed until a consensus was reached.
- ✓ Inter-coder Agreement: A sample of 40 reflective notes (20%) was coded independently by both researchers, resulting in an agreement rate of 87%. Minor discrepancies were settled through discussion.
- ✓ Member Checking: Initial interpretations were presented to participants to validate the accuracy and authenticity of representation.
- ✓ Thick Description: Detailed excerpts from reflective notes and interviews are presented in the findings to support transparency. It allows readers to evaluate transferability.
- Case analysis: For each participant, the study included.
- ✓ Profiling the pre-service teacher.
- ✓ Mapping their school internship experiences.
- ✓ Analyzing their conceptual and practical understanding of reflective practices.
- Ethical considerations: Ethical protocols were strictly followed, including informed consent, voluntary participation, and the assurance of anonymity and confidentiality throughout the study.

#### 1.8. Analytical Framework

The analysis of reflective notes was guided by a framework developed by the researchers, drawing from the theoretical constructs of Hatton and Smith [17] and Ward and McCotter [18] focusing on levels and dimensions of reflection. It is divided into two subheads:

- 1) Levels Descriptive Writing, Descriptive Reflection, Dialogic Reflection, Critical Reflection.
- 2) Dimensions Area of Concern, Inquiry, and Change.

# 1.8.1 Levels

This section outlines the characteristics of four writing types representing different reflection levels.

Descriptive writing: This level involves mere event or literature reporting without reflection. Statements are brief, superficial, and lack genuine engagement, describing without deeper analysis or insight.

Descriptive Reflection: This level explains reasons based on personal judgment or literature, focusing on problem-solving outcomes rather than causes. It emphasizes effective solutions without considering alternative perspectives. Dialogic Reflection: This level involves self and peer dialogue to explore reasons, consider judgments, and alternatives. It is analytical and integrative, linking perspectives through continual questioning and deeper examination of classroom practices.

Critical Reflection: This level explains decisions or events by considering broader historical, social, and political contexts, recognizing that actions can have varied meanings across different contexts.

#### 1.8.2. Dimensions

This reflection framework consists of three dimensions: Area of Concern, Inquiry, and Change [18].

- Area of Concern what is the focus of concerns about practice?
- Inquiry what is the process of inquiry?
- Change How does inquiry change practice and perspective?

Descriptive writing lacks curiosity and complexity; the area of concern is self-centeredness, as inquiry shows no questioning and often blames others, hindering changes in practice or perspective.

In descriptive reflection, the area of concern is on narrow tasks, and inquiry does not involve deeper questioning or multiple perspectives. Although aimed at improving practice, it yields limited insight, resulting in superficial or minimal change. In dialogic reflection, the area of concern is learning processes, students, and school dynamics. Inquiry involves experimenting, evolving questions, and incorporating others' perspectives, leading to new insights and meaningful change.

Critical Reflection: This level requires time, and the area of concern is on fundamental assumptions and purposes, exploring what is truly valuable. Inquiry involves ongoing questioning, leading to perspective shifts over time.

Table 2 presents the framework used for analyzing the reflective notes of pre-service teachers. The framework categorizes reflections into four progressive levels descriptive writing, descriptive reflection, dialogic reflection, and critical reflection based on the dimensions of *area of concern*, *inquiry*, and *change*. Each level shows a deeper engagement with reflective thinking, moving from surface-level descriptions of classroom events to critical analyses that take into account ethical, moral, and socio-cultural contexts. This framework enables an understanding of how pre-service teachers' reflections evolve in complexity and depth over time.

Table 2. The framework for the analysis of reflective notes by Pre-Service Teachers.

Levels	Dimensions			
•	Area of concern	Inquiry	Change	
Descriptive writing	Self-centered, the teacher is reacting according to tradition and authority, prioritizing control over students, time, and the teaching-learning experience.	No question about change; not an acknowledging problem; if acknowledging the problem, then the problem is with the system or children; no attempt has been made to give reasons or to justify events.	Change has occurred concerning tradition or authority. Change is according to the rules and regulations of the school system.	
Descriptive reflection	The focus is on specific tasks, including teaching, but it does not consider connections between various issues.	Solve the problem on an immediate basis, but do not go beyond it. Descriptively give rationale/Reasons only.	A change in the situation takes place, but it doesn't lead to a new perspective.	
Dialogic reflection	The focus is on students: their learning, problems, struggles, etc., the process of learning, and other significant aspects of the school.	Interaction with others takes place, i.e., peers, students, and others. A teacher is always open to new ideas and possible alternatives.	New insights develop about teaching, learners, and the strengths and weaknesses of a teacher.	
Critical reflection	The focus is on personal involvement with fundamental pedagogical, ethical, moral, cultural, or historical concerns and its impact on students and others.	Here, the questions have been raised to challenge existing assumptions and beliefs based on long-term ongoing inquiry.	Change in perspective takes place that is located in and influenced by multiple socio-political and historical contexts.	

Note: Hatton and Smith [17] and Ward and McCotter [18].

#### 2. FINDINGS AND ANALYSIS

2.1. Naina's Journey of Reflective Practices

# 2.1.1. Setting the Context

The following section, based on semi-structured interviews, portrays the pre-service teacher's B.El.Ed journey and views on reflective practices.

Naina, 22, joined B.El.Ed. under family influence. During her internship in a central government school, she taught 54 fifth graders and noted a focus on curriculum over understanding. Initially struggling with class management, she gradually favored discussions and saw an improvement in the teaching-learning process. Her 40-entry journal evolved from narrative to analytical. Though clear on descriptive/dialogic reflection, critical reflection remained vague. She highlighted time constraints, theory-practice gaps, and forgetting events (when delayed in writing) as challenges while maintaining reflections. She valued peer feedback, preferred bilingual, flexible formats,

and opposed daily reflections due to academic pressure. Reflective writing, for her, became focused, reasoned, and theory-linked over time.

# 2.1.2. Trajectory of Reflective Practices

Naina's 40 journal entries were categorized into four levels: descriptive writing, descriptive, dialogic, and critical reflection, using a framework developed by researchers to trace her reflective growth. Table 3 presents the frequency and percentage of different levels of reflection demonstrated by Pre-service Teacher 1. The data indicate that most reflections fall under the descriptive reflection level (65%), followed by descriptive writing (45%). Only a small proportion of entries (10%) reflect dialogic reflection, while critical reflection is absent.

Table 3. Reflection level: Frequency and percentage (Pre-service teacher 1).

Reflection level	Frequency	Percentage
Descriptive writing	18	45%
Descriptive reflection	26	65%
Dialogic reflection	4	10%
Critical reflection	0	0%

After analyzing the reflective journal, it was revealed that the majority of the reflections are descriptive writing and descriptive reflection. Most of Naina's reflections were descriptive, focusing on daily tasks and classroom incidents, with limited analysis and a tendency to attribute issues to external factors.

#### 2.1.3. Descriptive Writing

Naina's reflections primarily offered straightforward descriptions of events at school without deeper discussion or analysis. Her focus was mainly on two areas.

- Teaching-Learning Process in the Classroom.
- Establishing the Resource Centre.

#### 1. Teaching-Learning Process in the Classroom

Naina focused on lesson completion as a measure of effectiveness, described activities in detail, and often blamed disruptions on others, showing limited self-reflection or analysis of student learning.

"I felt very upset. My plan was not executed in the way I had planned. I was not able to complete my plan. All the children were just disturbing the class; they just walked here and there and did not listen to my instructions."

-Day 1

# 2. Establishing Resource Room

Naina documented resource room development as a collaborative, time-bound effort, emphasizing teamwork. Her reflections were mostly descriptive, with superficial assessments like "good," lacking critical analysis or reasoning.

Today, we all were engaged in doing resource room work as we decided to complete our task because our resource room work is going slow. - Day 10

#### 2.1.4. Descriptive Reflection: Emerging Themes

Naina's reflections in this category largely described events with limited analysis or exploration of alternative perspectives. While some reasons were provided for observed situations, deeper engagement or critical questioning was mostly absent. The following key themes emerged:

# 1. Challenges Faced by Students in Learning

Naina used concrete materials to develop student understanding but focused on actions, not pedagogy. She blamed weak English on regular teachers, offering no solutions or self-reflection.

"I corrected their misunderstanding by using concrete material... the student understood it through observation." (Day 2)

#### 2. Observation of Physical Punishment in School

Naina disapproved of corporal punishment but reflected descriptively, without engaging legal frameworks like the Right to Education Act (2009) or exploring alternative disciplinary approaches.

"I think this is not the way to handle the situation and insult the child and his father..." Day 22.

# 3. Dynamics of the Examination System

Naina noted flawed implementation of continuous and comprehensive evaluation (CCE) and exam-related stress but offered shallow reflections, lacking connections to policy, historical context, or pedagogical alternatives.

"CCE pattern came to reduce students' stress, but teachers are making this a source of stress..." Day 18

# 4. Fear of Supervision

Naina expressed anxiety about evaluations due to student behavior, supervisor impressions, and marks. Although her confidence improved, she did not critically assess the impact of anxiety on her teaching or learning.

"Today was again our supervision day, but... our fear and hesitation had disappeared." (Day 38)

# 2.1.5. Dialogic Reflection

Naina's reflective accounts revealed engagement in self and peer dialogue to interpret her experiences, explore alternatives, and understand underlying reasons. She used reflection as a tool for meaning-making and future planning. Two key themes emerged from her writings, which are as follows:

#### 1. Teacher's Dilemmas

Naina expressed concern over teachers' excessive non-teaching duties, such as record-keeping and managing student data, which reduce the time available for teaching. Drawing on field experience and the Right to Education Act (Section 27), she argued that these tasks should be delegated to non-teaching staff to enhance classroom learning quality.

Today was the first time I registered her. I saw her burden. She had included all the lists such as student name, ID, date of birth, father's name, mother's name, category of student ST, SC, OBC, etc. students promoted to the next class, passed students, scholarship students, etc. They have to make so many lists. Day 23

# 2. Understanding Learners

Regular interaction with students helped her recognize their energetic nature and learning needs. This awareness prompted her to adopt learner-centered and constructivist pedagogies to foster engagement and deeper understanding. She explored alternatives to traditional teaching, reflecting on how to better align instruction with students' characteristics.

#### 2.1.6. Reflective Maturity

Naina's reflections indicate a movement from descriptive writing toward descriptive reflection. She exhibited early signs of dialogic thinking but did not progress to the critical reflection stage. Her understanding was rooted in personal viewpoints, often without linking to broader sociocultural or systemic perspectives. Feedback from supervisors played a key role in nudging her toward more analytical writing, though constraints like time, workload, and lack of clarity regarding reflective formats limited her growth.

#### 2.2. Chesta: Emergence of Dialogic Reflection

#### 2.2.1. Setting the Context

The upcoming section has been obtained from the semi-structured interview that depicts the pre-service teacher's journey to B.El.Ed. and her perspective on reflective practices.

Chesta joined B.El.Ed. because of parental pressure, but enjoyed working with children. During her internship with Class 3 (40 students), she submitted weekly reflections but found daily writing repetitive. She valued theory-practice connections when relevant and saw reflection as analyzing experiences to improve teaching. Supervisor feedback and

peer discussions improved her classroom management and integration of theory. However, time constraints limited her writing. She suggested weekly or biweekly reflections, supported audiovisual formats, and opposed grading to keep reflection authentic. She viewed reflection as essential but needed flexibility and relevance. Table 4 shows the frequency and percentage of reflection levels demonstrated by Pre-service Teacher 2.

Table 4. Reflection level: Frequency and percentage (Pre-service teacher 2).

Reflection level	Frequency	Percentage
Descriptive writing	0	0%
Descriptive reflection	8	13%
Dialogic reflection	32	80%
Critical reflection	1	3%

Chesta's journal (40 entries) showed high levels of engagement. After analyzing her reflective notes, the researchers found that her reflective writings mainly fall under the category of dialogic reflection, with a few writings under descriptive reflection. Only one reflection falls under the category of critical reflection, and none are classified as descriptive writing.

#### 2.2.2. Descriptive Reflection

Chesta's reflections primarily described events with some analytical depth, but lacked exploration of multiple perspectives or alternatives. The following themes have emerged from her writings:

- Challenges and Dilemmas of Teachers: She highlighted physical and mental stress faced by teachers due to
  excessive administrative work (e.g., maintaining registers, distributing supplies). Although she conducted
  interviews with the teachers, she did not propose alternatives.
- 2. Children and the Classroom: She noted issues like absenteeism and disciplinary problems. Despite acknowledging the problems, she did not investigate root causes or seek guidance.
- 3. Importance of Co-Curricular Activities: She recognized the role of activities like games and celebrations in children's holistic development, but did not strategize their implementation. She felt disappointed when festivals were not celebrated.

The importance of physical education, games, and sports to the overall development needs to be reinforced at the policy level with participation by administrators, other subject teachers in schools, the health departments, parents, as well as students. - Day 15

# 2.2.3. Dialogic Reflection

Most of Chesta's reflections engaged with alternative perspectives and problem-solving through inner and peer dialogue. The following themes have emerged from her writings:

 Lesson Planning & Pedagogy: She reflected on teaching challenges, such as pacing lessons and assessment issues. She embraced peer learning and group work. She advocated for integrating local contexts, storytelling, and student experiences into pedagogy.

Today, while introducing 'non-standard' units of measurement in Maths, I used a picture book, 'How Big Is a King's Foot'. So, through the storytelling method, I tried to make students aware of and understand the traditional method of measuring length. There are many benefits of teaching through the storytelling method. Therefore, I realized that students observed everything very carefully. Day 26

2. Nature of Examination System: She critiqued the stress-inducing, recall-based exam system. She questioned the effectiveness of Continuous and Comprehensive Evaluation (CCE) and its implementation challenges.

Why is our examination system like this, which only brings fear to us? Not only at the school level, but at every stage of life (at college life, job interviews), we face the fear of examinations that puts mental stress on us. Day 7

3. Co-Curricular Activities: She emphasized integrating theatre, games, and creative expression into regular teaching. She highlighted their value in cognitive and emotional development.

When it comes to small children, these activities and games were not conducted in the same way or for the same purpose as we learned in theatre classes. Even if we instruct students to form a circle or a straight line, they take a considerable amount of time to settle. I think this activity should have been done in a group of a few students. Day 21

#### 2.2.4. Critical Reflection

Rare but significant, this type of reflection revealed deep awareness of sociopolitical contexts influencing school practices. Chesta critiqued caste-based punishments and gender segregation, linking them to patriarchy and emphasizing the need for teachers' ideological self-awareness to drive change.

# 2.2.5. Reflective Maturity

Chesta demonstrated advanced reflective maturity, linking classroom experiences with theory and society, and developing critical reflection. Supportive mentorship and peer discussions shaped her growth, helping to refine her pedagogy and beliefs through dialogic reflection and diverse perspectives.

# 2.3. Pooja: Navigating Reflection Through Description

# 2.3.1. Setting the Context

The upcoming section has been obtained from a semi-structured interview that presents the pre-service teacher's journey to B.El.Ed. and her perspective on reflective practices.

Pooja, living with elbow fusion, faced teasing but found college support. Encouraged by family and inspired by a cousin, she joined B.El.Ed. Her internship with 38 students, including two with special needs, fostered patience and inclusive strategies. She adapted lessons but struggled with spontaneity and outcomes. Reflections were mostly descriptive, valuing feedback, yet hindered by late submissions. She noted that school hierarchies limited her initiatives. Pooja recommended embedding reflective writing in theory classes and stressed timely feedback. Her journey highlights personal challenges, inclusion, and reflective growth.

Despite her strong commitment to teaching, Pooja struggled with reflective writing. Her journal entries (n=40) were largely descriptive, recounting daily events with minimal analysis or questioning. Table 5 presents the frequency and percentage of reflection levels demonstrated by Pre-service Teacher 3. Most of her reflective writings were descriptive, some descriptive reflection, with none reaching dialogic or critical reflection levels.

Table 5. Reflection	level: Fre	quency and	percentage	(Pre-service	teacher 3).
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Reflection level	Frequency	Percentage
Descriptive writing	25	63%
Descriptive reflection	15	38%
Dialogic reflection	0	0%
Critical reflection	0	0%

# 2.3.2. Trajectory of Reflective Practices

# 2.3.3. Descriptive Writing

Pooja's descriptive writing primarily consisted of straightforward daily recounts lacking critical reflection or connection to broader educational contexts. The key themes emerging from her notes include:

1. Inclusive and participatory classroom: Special needs students' behaviors and fears were noted descriptively, without exploring their needs or analyzing teaching adaptations and participation changes.

In my class, there is a child with special needs named Sakshi. She is very aggressive in nature. It's a bit difficult task to handle her with all the other students. Also, her learning pace is slow.

- Day 3

2. Class Ethos: Classroom management was equated with maintaining silence, and success was judged by the welcoming response of students rather than the achievement of learning objectives.

Some of the student teachers were teaching; they were trying to keep their classes well-managed. For them, a well-managed class is a class with pin-drop silence. - Day 1

3. School inspection routines: inspections were described as routine, fear-inducing events that altered school dynamics. Interns were excluded from responsibilities like invigilation to avoid mistakes.

There was a DDO inspection, and teachers were asking us not to talk and do our work. - Day 8

4. Examination Practices: Reflections centered on the difficulty level of questions in the question paper and student comprehension, without linking these to pedagogy or student learning levels.

In 4th class, a question was asked: 'Draw the top view of a tree'. This question was highly debated by teachers. Teachers argued that how can a child draw the top view of a tree if he had not seen it. - Day 17

# 2.3.4. Descriptive Reflection

Pooja's reflective writing went beyond mere description to include initial explanations or justifications for events, though these remained largely report-like. Key themes identified were:

1. Role of Teacher in Pedagogy: She valued discussion and revision for reinforcing key points and believed roleplay fostered independence and teamwork, despite requiring a more authoritative stance. She preferred peer correction over direct teacher criticism to avoid embarrassing students.

Discussion is a nice way ... a school teacher can easily change the perspective of a child. - Day 27.

2. Students' Background: Pooja recognized labeling impacts and valued understanding students' social contexts, fostering trust and participation, but lacked deeper critical analysis of these effects.

Some mam has said not to call us non-readers and instead call us weak students. It was good that teachers were conscious about children's mental growth.... - Day 16

# 2.3.5. Reflective Maturity

Pooja's reflections were mainly descriptive, showing awareness of challenges but lacking analysis or theory-practice links. Her experience underscores the need for guided support, feedback, and emotional scaffolding, especially for those facing personal or institutional barriers.

# 2.4. Sonia: Early Attempts at Reflective Thinking

# 2.4.1. Setting the Context

The upcoming section has been extracted from the semi-structured interview that depicts the pre-service teacher's journey to B.El.Ed. and her perspective on reflective practices.

Sonia from Narela, Delhi, chose B.El.Ed. influenced by family and job security, shifting from engineering. During her 4th-year internship, teaching 40 fourth graders, she faced challenges but noted positive student responses. Limited resources and time constraints hindered her planning and reflections, which were weekly and mostly descriptive.

Sonia valued the resource room and patience in teaching, but lacked clarity on dialogic and critical reflection. She recommended reflection time during school hours, pre- and during-internship orientations, honest non-evaluative reflections, exposure to varied examples, and detailed feedback to enhance reflective practice.

#### 2.4.2. Sonia's Journal

Most reflections described daily teaching and classroom management, with occasional reasons for decisions, but lacked analysis of learning experiences or student participation. Table 6 presents the frequency and percentage of

reflection levels demonstrated by Pre-service Teacher 4. The findings indicate that most reflections are categorized as descriptive reflection (60%), followed by descriptive writing (50%). There are no instances of dialogic or critical reflection.

Table 6. Reflection level: Frequency and percentage (Pre-service teacher 4).

Reflection level	Frequency	Percentage
Descriptive writing	20	50%
Descriptive reflection	24	60%
Dialogic reflection	0	0%
Critical reflection	0	0%

#### 2.4.3 Descriptive Writing

Sonia's reflections were mostly descriptive, recounting daily teaching with minimal analysis or critical engagement, highlighting three key themes:

1. Activity-Oriented Classroom: Sonia documented diverse teaching aids and student engagement but lacked critical reflection on their purpose, alignment with goals, or pedagogical effectiveness.

I asked riddles to students. They found some riddles easy and some difficult. -Day 4

- 2. Role and Responsibilities of Teachers: She observed varied teacher behaviors but did not analyze their ethical, social, or institutional implications or the role of teacher agency in shaping education.
- 3. Everyday routines of the school: She noted daily school activities and issues like linguistic diversity and parental misconceptions, but reflected descriptively without deeper insights into inclusive or child-centered practices.

# 2.4.4. Descriptive Reflection

Sonia's reflections included personal interpretations but lacked alternative perspectives or critical engagement, revealing two main themes, which are as follows:

1. Activity-Oriented Classroom

Sonia justified teaching methods based on student engagement but lacked a deeper analysis of learning outcomes, contextual limits, or alternative strategies, resulting in surface-level reflections.

"The poem was boring for students because it had difficult text..." - Day 5

2. Students' Attitude Towards Examination

She noted student disengagement from the no-detention policy but lacked reflection on its educational implications or links to Continuous and Comprehensive Evaluation and policy debates.

"I think the reason behind is our no-detention policy..." - Day 9

# 2.4.5. Reflective Maturity

Sonia's reflections detailed events but lacked depth, reflecting challenges in balancing roles. Her reflections showed basic analysis with personal judgments but lacked depth, alternative views, and links to pedagogical or policy frameworks. It highlights the need for early orientation, structured support, and flexible reflective practices.

# 2.5. Nisha: Reflection as Recall, Not Reconstruction

# 2.5.1. Setting the Context

The coming section is extracted from the semi-structured interview that depicts the pre-service teacher's journey to B.El.Ed. and her perspective on reflective practices.

Nisha joined B.El.Ed. reluctantly due to parental pressure, initially dissatisfied but gradually engaged. During her internship with 47 students, she submitted mostly descriptive weekly reflections, confusing reflection with her physics background. She equated reflection with daily recounting, lacking dialogic or critical insight, and seldom

linked theory to practice. She improved through feedback, but never cited academic literature. Nisha recommended reducing journal frequency, valued peer discussions, and suggested workshops with scenarios. She urged regular orientation, supportive supervision, and clearer guidance for effective reflective practice.

#### 2.5.2. Trajectory of Reflective Practices (Nisha's Journal)

Most of her reflections were descriptive, narrating teaching experiences with occasional personal judgments. These showed slight movement beyond description but lacked sufficient depth to be considered analytical or transformative [17]. Table 7 presents the frequency and percentage of reflection levels demonstrated by Pre-service Teacher 5. The data indicate that the majority of reflections are classified as descriptive reflection (60%), followed by descriptive writing (50%). There are no entries reflecting dialogic or critical reflection.

Table 7. Reflection level: Frequency and percentage (Pre-service teacher 5).

Reflection level	Frequency	Percentage
Descriptive writing	20	50%
Descriptive reflection	24	60%
Dialogic reflection	0	0%
Critical reflection	0	0%

Nisha's reflections focused on "what happened" without exploring reasons or alternatives. Lacking structured orientation, she gained limited improvement through peer and supervisor feedback but didn't develop deeper reflection.

#### 2.5.3. Descriptive Writing

Her reflections were mainly descriptive, focusing on classroom events without deeper analysis or critical insight, categorized into three broad themes, which are as follows:

# 1. Routines of Examination

She reported teachers' workload, lax invigilation, and facilitation of cheating during examinations, but limited her accounts to descriptive reporting, without analyzing underlying causes, policy implications, or impacts on student performance.

E.g., "During the examination, students were asking the meaning of the questions which I told them." - Day 8

- 2. Teacher-Student Rapport and Fear
- a. Teacher-Student Relationship

She observed negative teacher attitudes causing student withdrawal but lacked analysis of pedagogical impacts or links to rights-based frameworks like the Right to Education Act (2009) and inclusive practices.

E.g., "The teacher scolded them... After that, their daughter didn't ask anything from the teacher." - Day 20

b. Fear of Teachers

She documented frequent corporal punishment but did not critique it through theoretical or legal lenses. Students were punished for things like not doing homework. No alternatives or links to institutional learning were suggested.

E.g., "They told me that their teacher often punishes them when they do not complete their homework..." - Day 21

3. Transaction of Lesson Plans in the Classroom

She described using games, stories, theatre, and role-play to engage students, focusing on enjoyment and participation, but without analyzing learning outcomes, pedagogical rationale, or links to broader educational philosophies.

E.g., "Role play is the best activity... they all feel so happy to perform something." - Day 11

#### 2.5.4. Descriptive Reflection

Her reflections were mostly descriptive, with minimal analysis or theory links, focusing on events without critical or future-oriented insights. Three key themes emerged:

1. Pedagogical Strategies and Mechanisms: She described teaching methods such as role-play and storytelling, valued for engagement and enjoyment. However, reflections lacked analysis of learning outcomes, theory, or connections to children's interests, cognition, and prior experiences.

"Students were imagining the next scene of the story, which is good because imagination is important for cognitive development." - Day 4

Expectations from In-Service Teachers: She blamed in-service teachers' reliance on guidebooks for poor language learning but didn't consider alternative methods or systemic challenges, holding unexamined, generalized expectations.

"Teachers did not effectively teach language... they normally use guides." - Day 13

3. Reflections on the Examination System

She criticized the 'No Detention Policy' and exam malpractice but lacked policy context or research references, overlooking teacher challenges such as administrative burdens and result pressures.

"No Detention Policy should not be followed in school because it has a bad impact on children's learning." - Day 6

The participant's reflections were detailed but remained descriptive, lacking critical analysis, alternative perspectives, and theoretical engagement.

# 2.5.5. Reflective Maturity

Nisha's journal reflects early-stage, mostly descriptive practice with limited critical analysis. She struggled to link theory and practice, viewing reflection as compliance. Her case underscores the need for mentoring, theory, and emotional support to foster authentic reflection.

# 3. DISCUSSION

Following the discussion on five participants' reflective evolution, this section presents a holistic analysis of preservice teachers' reflective practices, organized into key thematic areas.

- Conceptual understanding of reflective practices.
- Content of reflection.
- Levels of reflection of pre-service teachers.

#### 3.1. Conceptual Understanding of Reflective Practices

The study reveals varied understandings of reflection among pre-service teachers. Naina, Chesta, and Pooja viewed reflection as revisiting actions to solve problems, while Chesta, Sonia, and Nisha saw it as improving the teaching-learning process.

Nisha had the least understanding, treating reflection as mere description. This aligns with literature highlighting diverse definitions of reflective practice. Most remained at descriptive levels, though Chesta grasped dialogic reflection and partially critical reflection; Nisha understood descriptive writing alone. All emphasized incorporating multiple perspectives and promoting improvement in teaching and learning, aligning with the goal to develop reflective practitioners.

# 3.2. Content of Reflection

Table 8 indicates the content that each pre-service teacher reflected upon in their reflective journals. The table illustrates the variation in content across reflection levels, showing that most participants engage extensively in descriptive and descriptive reflections, with fewer instances of dialogic and critical reflection.

Table 8. The content of the reflection.

Participant	Descriptive writing	Descriptive reflection	Dialogic reflection	Critical reflection
Naina	Teaching-Learning Process in the classroom.  Establishing Resource Room.	<ul> <li>Challenges faced by the students in learning.</li> <li>Observation of physical punishment in the school.</li> <li>Dynamics of the examination system.</li> <li>Fear of supervision.</li> </ul>	Teacher's dilemmas.     Understanding learners.	×
Chesta	×	<ul> <li>Challenges and dilemmas of a school teacher.</li> <li>Children and the classroom: Some issues</li> <li>Importance of cocurricular activities in the school.</li> </ul>	<ul> <li>Lesson plan and its associated activities.</li> <li>Nature of Examination system.</li> <li>Co-curricular activities: Importance in the overall development of students.</li> </ul>	Related punishment with social and gender issues.
Pooja	<ul> <li>Inclusive and Participatory classroom.</li> <li>Ideas and Ethos of Class.</li> <li>Inspection routines in the school.</li> <li>Examination routines in the school.</li> </ul>	Role of teacher in the pedagogy.     Students' background: some ideas.	×	×
Sonia	<ul> <li>Activity-oriented classroom.</li> <li>Role and Responsibilities of Teachers.</li> <li>Everyday routines of the school.</li> </ul>	Activity-oriented classroom.     Student's attitude towards examination.	x	×
Nisha	<ul> <li>Routines of examination.</li> <li>Teacher- rapport and fear.</li> <li>Transaction of lesson plans in the classroom.</li> </ul>	<ul> <li>Strategies and         Mechanisms used         in the pedagogy of         different subjects.</li> <li>Presumptions and         expectations of the         pre-service teacher         from the in-service         teacher.</li> <li>Examination         System: Some         aspects.</li> </ul>	×	×

Pre-service teachers' reflections focused on lesson execution, the examination system, and teacher-learner roles. Most reflections were descriptive, briefly explaining teaching decisions without deep analysis. They emphasized covering planned content within time, often self-focused without evaluating teaching quality or decision impacts, highlighting limited critical engagement [15, 17, 18].

# 3.3. Levels of Reflection of Pre-Service Teachers

Findings align with Ward and McCotter [18] that dialogic and critical reflection are challenging for pre-service teachers. Reflections mainly exemplify [20] Reflection-on-Action, supported by Hatton and Smith [17] concept of thoughtful, iterative reflection. Table 9 presents a composite profile of reflection levels across all five pre-service teachers.

Table 9. Composite profile of levels of reflection of pre-service teachers.

Participants	Descriptive writing	Descriptive reflection	Dialogic reflection	Critical reflection
Naina	45%	65%	15%	0%
Chesta	0%	13%	80%	3%
Pooja	63%	38%	0%	0%
Sonia	50%	60%	0%	0%
Nisha	50%	64%	0%	0%

The study shows reflective writing evolving from narration to dialogic and limited critical analysis. When the reflective writing is overly prescriptive, it tends to be descriptive rather than transformative [21]. Supervision and peer support aided reflection, but rigid formats, workload, and poor feedback hindered depth. Proper scaffolding, exemplars, feedback, dialogue, and flexibility are vital. According to recent research, systematic mentoring and collaborative reflection help pre-service teachers to engage in critical reflection on their classroom experiences [22]. Programmes must restructure journaling to support reflective growth, recognizing its emotional and intellectual demands to develop effective reflective practitioners [23]. Thus, one can say that reflective practice is a complex process that is vital for the professional and identity development of pre-service teachers [24, 25].

#### 4. CONCLUSION

This qualitative case study has explored how five pre-service teachers constructed their understanding of reflective practices. This study aims to gain an in-depth understanding of reflective practices in the elementary teacher education programme (i.e., B.El.Ed). The interpretations of the pre-service teachers' conceptions and understanding of reflective practice were captured through the transcription and analysis of semi-structured interviews and through the examination of the pre-service teachers' reflective journals. Reflective journal entries were analyzed using a framework developed by the researchers based on the work of Hatton and Smith [17], and Ward and McCotter [18]. The analysis of the data revealed that the majority of the pre-service teachers' written reflections were descriptive and primarily consisted of narration about their teaching experiences. As descriptions, they generally did not include critical or even basic questioning of what they did or why they were doing it. While description was the primary form of reflection in this study, at times, the pre-service teachers began to move beyond simple descriptions. The findings indicate that reflective practice develops progressively from descriptive to somewhat dialogic and limited critical analysis. Only one participant demonstrated a consistent dialogic reflection with occasional critical reflection in her reflective writing. This suggests that higher-order reflective practice requires systematic mentoring, scaffolding, and theoretical grounding. Peer dialogue, supervisor feedback, and a structured framework of reflective practices are essential in enhancing reflective depth and analytical thinking. The developmental path of many pre-service teachers revealed a concern for the teaching-learning process, primarily focused on themselves, the implementation of lesson plans in the classroom, classroom activities, student behavior, and the functioning of the school's examination system.

The findings have key implications for teacher education programmes. There is a need to include a structured framework of reflective practices, exemplars of reflective writing, interaction with peers and mentors, and a formative feedback mechanism. It encourages a deeper analysis through reflection. Reflection should be understood as both a cognitive and affective process. It aids in building ethical reasoning, critical inquiry, and sensitivity to complex classroom realities.

In closing, reflective practice in pre-service teacher education programmes should be seen as a developmental and dialogic process within curriculum design, mentoring, and field experiences. Future research should investigate this further by incorporating additional longitudinal and comparative studies to explore how reflective practices shape teachers' professional and pedagogical innovation over time.

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**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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