

# Qualitative Insights into Teacher Professional Development and Classroom Practices in Bangladeshi Primary Schools

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## ABSTRACT

Teacher professional development (PD) is widely regarded as important for enhancing the quality of teaching, yet its influence on day-to-day classroom work in Bangladesh is inconsistent. This study investigates how primary teachers understand the training they receive and how far they are able to use it in their regular lessons. The study followed a qualitative approach and drew on semi-structured interviews with ten teachers alongside twenty-five classroom observations in government primary schools across urban and semi-urban settings. The findings indicate that PD encourages teachers to plan lessons more deliberately, focus more clearly on learning objectives, experiment with interactive strategies, manage classrooms more confidently, and use formative assessment more regularly. Even so, the extent to which these practices appear in classrooms varies from teacher to teacher. Large class sizes, limited teaching resources, pressure to cover the curriculum, and the absence of structured follow-up support often make it difficult for teachers to apply what they learned during training. Many teachers also remarked that PD sessions tend to describe ideal situations that do not match the realities they face. The study suggests that although PD strengthens pedagogical awareness, its impact depends on continuous guidance, supportive school conditions, and training models that reflect the actual context of primary classrooms. Bringing together teachers' reflections with observed practice, the study points to the need for school-based professional learning, collaborative support, and practical follow-up processes to narrow the gap between training and classroom implementation.

**Keywords:** Primary education, Teacher professional development, Classroom practice, Formative assessment, Bangladesh

## INTRODUCTION

Teacher professional development (PD) is widely regarded as one of the most important influences on teaching quality. It shapes how teachers prepare lessons, engage students, manage classroom interactions and assess learning. International research shows that well-planned professional learning strengthens teachers' pedagogical knowledge, encourages them to adopt more interactive and student-responsive approaches and improves their ability to address learners' diverse needs. For countries like Bangladesh, where improving foundational learning remains a national priority, the quality of instruction in primary schools has long-term consequences for children's overall academic progress. During the past decade, Bangladesh has made significant efforts to improve primary education. (Bangladesh, n.d.) Various government initiatives led by the Directorate of Primary Education (DPE) and the National Academy for Primary Education (NAPE) have expanded opportunities for in-service training. (Annual Report on NAPE activities, n.d.) These programmes emphasize learner-centred methods, formative assessment, classroom management and subject-based instruction. Although participation in PD has increased, questions remain about the extent to which training leads to meaningful changes in daily teaching practices.

Most existing studies in Bangladesh focus on PD programme structures, policy issues or administrative challenges. Far fewer examine how teachers personally experience training or how successfully they can apply training concepts in real classrooms. Many teachers work in environments marked by overcrowded classrooms, limited instructional materials and pressure to complete a demanding curriculum. These conditions often

constrain their ability to implement interactive or student-centred strategies introduced during training. Understanding teachers' perspectives is therefore essential for evaluating the practical impact of PD. Global research suggests that PD is most effective when it is continuous, collaborative and closely aligned with teachers' work environments. Short-term workshops without mentoring or follow-up support tend to produce only modest changes. Teachers are more likely to adopt new ideas when they receive ongoing guidance, opportunities for peer learning, reflective dialogue and hands-on demonstrations. When PD follows a top-down model focused mainly on compliance, teachers may grasp new concepts but still struggle to apply them consistently.

This study addresses a significant gap by exploring how primary teachers in Bangladesh interpret their professional development experiences and how those experiences influence their instructional decisions. Through a combination of interviews and classroom observations, the study examines both teachers' reflections and their actual practices. This approach helps reveal where professional learning aligns with classroom behaviour and where gaps remain.

In summary, although PD is widely acknowledged as essential for improving teaching quality, its effectiveness depends on how well training aligns with teachers' everyday realities and whether continuous support is available. This study adds to the growing body of research seeking to understand how professional learning interacts with the lived experiences of primary teachers in Bangladesh.

## LITERATURE REVIEW

Teacher professional development (PD) is widely acknowledged as essential for strengthening instructional quality and improving student learning. Contemporary scholarship increasingly views PD not as an isolated event, but as a continuous and practice-embedded learning process through which teachers refine their instructional skills and professional identities. Rather than focusing solely on formal workshops, recent literature emphasizes growth over time, critical reflection, and ongoing engagement with new pedagogical ideas (Desimone, 2009; Darling-Hammond, Hyler & Gardner, 2017). Effective PD supports teachers in planning coherent lessons, selecting appropriate teaching strategies, creating orderly learning environments, and using assessment techniques that promote deeper understanding capacities especially critical at the primary level where foundational learning begins.

International evidence shows that PD is most impactful when teachers participate in sustained, collaborative, and contextually relevant learning opportunities. Professional learning communities, mentoring programs, joint lesson planning, coaching, and structured follow-up help teachers translate new ideas into everyday practice (Hargreaves & Fullan, 2012; Timperley, 2008). These models promote mutual learning and problem-solving, enabling teachers to experiment with teaching strategies, reflect on classroom experiences, and adapt instruction to meet learners' needs. In contrast, short, workshop-style training without ongoing reinforcement or classroom-based support often leads to minimal or temporary changes in practice. Teachers may understand new concepts yet struggle to integrate them into classroom instruction in a sustained manner.

Research consistently links well-designed PD with improvements in lesson planning, learner-centered pedagogy, formative assessment routines, and student engagement (Banerjee et al., 2007; Vong & Kwan, 2016). Teachers who regularly engage in professional learning tend to adopt practices such as group activities, questioning techniques, active learning tasks, and differentiated instruction. These strategies help create more participatory and inclusive classrooms. However, studies caution that the adoption of such practices is mediated by contextual realities. Teaching conditions such as class size, time constraints, access to materials, administrative expectations, and school leadership shape whether teachers can implement new pedagogical approaches consistently and effectively.

Scholars highlight that structural conditions are often decisive. Overcrowded classrooms, limited teaching materials, rigid curricula, and exam-oriented systems restrict teachers' ability to apply learner-centered strategies (World Bank, 2020; UNICEF, 2022). Even when teachers value interactive pedagogy, resource and time limitations may compel them to rely on whole-class or teacher-centered methods. Leadership support also plays a critical role. Schools with collaborative cultures where teachers are encouraged to experiment, share ideas, and observe one another's classrooms show greater success in sustaining instructional changes (Hendriks & Stoffels,

2020). Teachers' perceptions of the relevance and practicality of PD significantly influence implementation. Programs that address real classroom challenges, offer low-cost strategies, and acknowledge resource limitations tend to be more meaningful to teachers and yield stronger instructional change. A recent study examined how teachers' understanding of dialogic pedagogy evolved during professional development experiences. In Bangladesh, improving the quality of primary education remains a key policy goal, with initiatives from the Directorate of Primary Education and the National Academy for Primary Education focused on strengthening teachers' instructional skills and encouraging learner-centered teaching, according to recent research.

National studies report that teachers gain greater awareness of contemporary instructional strategies after attending training programs (Alam & Uddin, 2022; Begum & Kabir, 2023). These findings suggest improvements in pedagogical understanding and professional confidence. Despite these positive indications, teachers in Bangladesh frequently encounter challenges in applying new strategies. Overcrowded classrooms, shortages of materials, pressure to cover dense curricula, and limited mentoring or follow-up support all constrain implementation (Rashid & Chowdhury, 2020; UNICEF, 2022). As in many developing contexts, professional development is often delivered through brief workshops with insufficient attention to guided practice or school-based coaching. Consequently, the gap between training expectations and classroom conditions contributes to partial or inconsistent adoption of new practices. Although prior studies examine PD policies and teacher training participation, fewer explore how professional development experiences shape observable classroom behaviours. Little qualitative research connects teachers' perspectives with direct evidence from classroom observations. This gap limits understanding of how training translates into lived instructional practice. Examining teachers' experiences alongside what they actually do in the classroom is essential for evaluating PD effectiveness and designing more context-responsive training models.

This study contributes to this gap by analyzing how primary teachers in Bangladesh experience professional development and how they enact training concepts in classroom settings. By integrating interview and observation data, the research offers deeper insight into the relationship between professional learning and everyday teaching practice.

## **Research Questions and Objectives**

### **Research Questions**

This study examines the following research questions:

1. How do primary school teachers in Bangladesh perceive their professional development experiences?
2. In what ways does professional development influence teachers' classroom practices at the primary level?
3. What challenges do teachers encounter when applying professional development knowledge in classroom settings?

These questions are designed to explore teachers' lived experiences of professional development and to understand how training initiatives shape instructional practices within real classroom contexts.

### **Research Objectives**

The main objectives of the study are:

1. To explore primary school teachers' experiences and perceptions of professional development programs.
2. To examine how professional development influences classroom practices, including instructional planning, teaching strategies, and classroom management.
3. To identify challenges and contextual factors that affect the application of professional development in primary classrooms.
4. To generate practical insights that can inform the design of more effective, practice-oriented professional development programs in primary education.

## Significance of the Study

By focusing on teachers' perspectives, this study contributes to a deeper understanding of how professional development operates at the classroom level. The findings are expected to provide evidence-based insights for teacher trainers, educational planners, and policymakers involved in primary education. In particular, the study emphasizes the importance of ongoing support mechanisms that connect training to classroom practice, thereby enhancing teaching effectiveness in Bangladeshi primary schools.

## METHODOLOGY

### Research Design

This study adopted a qualitative research design to explore how primary teachers experience professional development and how these experiences influence their instructional practices. A qualitative approach was appropriate because the goal was to understand teachers' perceptions, interpretations, and classroom behaviours through rich, descriptive data rather than numerical measurement. The design allowed the study to capture the ways teachers make sense of professional learning and how they apply it within their classroom realities.

### Study Sites and Participants

The study was conducted in three government primary schools located in urban and semi-urban areas of Bangladesh. The schools were selected purposively based on accessibility and variation in contextual conditions such as student population, resource availability and geographic setting. A total of ten teachers participated in the study. Participants were selected using purposive sampling, focusing on teachers who had recently completed in-service professional development training. The sample included teachers with varying years of teaching experience to capture diverse perspectives. Each teacher was observed between two to three times, resulting in a total of twenty-five classroom observations distributed across the three sites.

### Data Collection Methods

Two complementary methods were used to collect data:

#### Semi-structured interviews

Interviews were conducted to explore teachers' experiences with PD, their perceptions of the relevance of training and the challenges they faced in applying new strategies. The semi-structured format ensured that key topics such as planning, pedagogy, assessment, classroom management and institutional support were discussed while still allowing space for participants to share their own insights.

#### Classroom observations

A total of twenty-five classroom observations were carried out using a structured checklist. The observations focused on lesson preparation, interaction patterns, teaching strategies, student engagement, and assessment practices. This provided direct evidence of how teachers enacted or adapted PD content in their classrooms. Using both interviews and observations allowed triangulation and helped connect what teachers reported to what they demonstrated in practice.

### Data Analysis

Data were analyzed using a systematic thematic analysis approach. The analysis followed three stages: open coding, axial coding and thematic development. In the first stage, open coding was used to identify meaningful segments from interview transcripts and observation notes. In the second stage, axial coding was applied to group related codes into broader categories based on conceptual similarities. In the final stage, these categories were refined into key themes aligned with the research questions.

To enhance analytical rigor, data from interviews and observations were compared to identify convergence and divergence. Reflexive consideration was given to potential researcher bias, and interpretations were reviewed multiple times to ensure consistency and credibility.

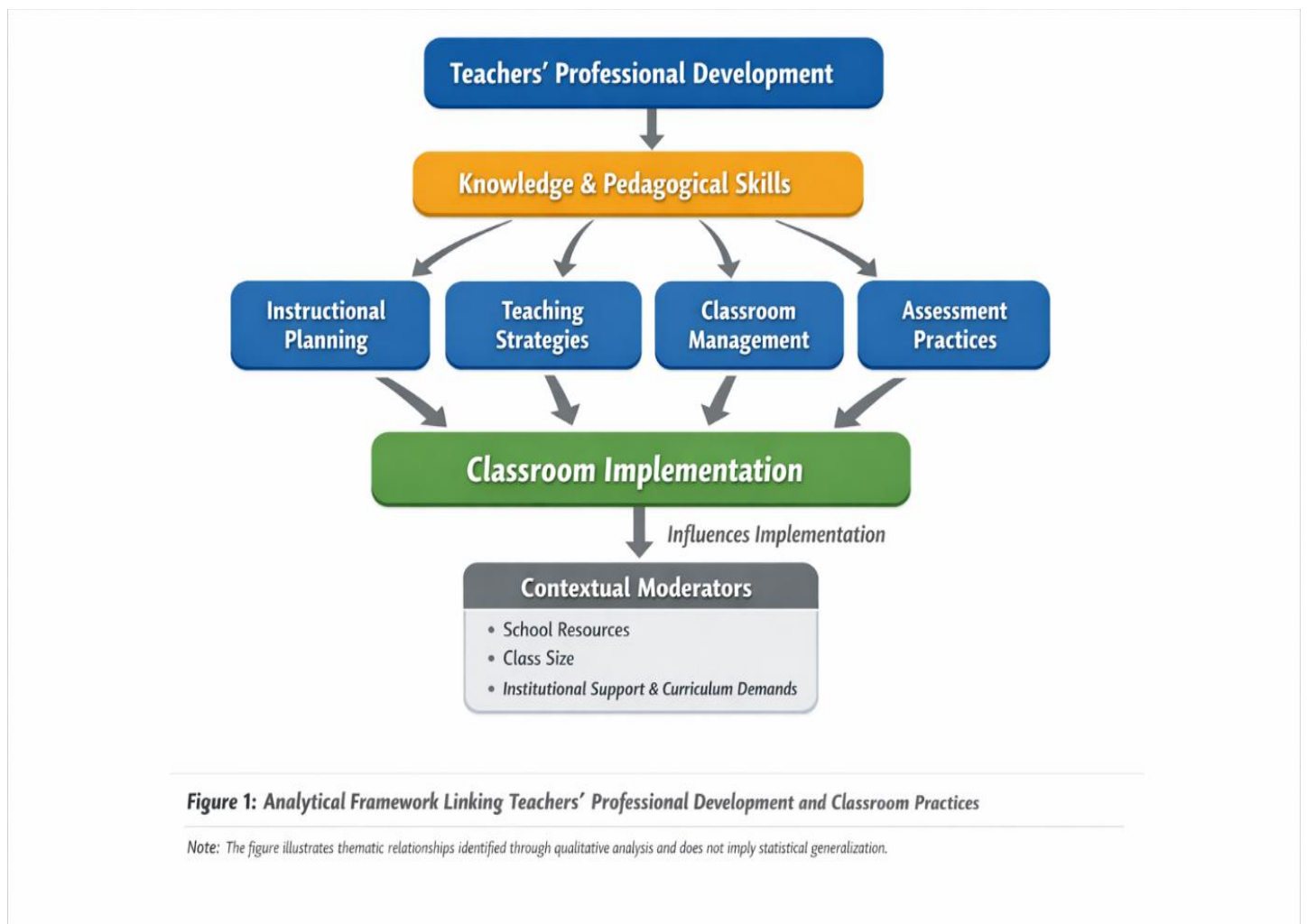
## Analytical Framework

The analytical framework views professional development as enhancing teachers’ pedagogical knowledge, which then influences four key areas of instructional practice:

- lesson planning
- teaching strategies
- classroom management
- assessment practices

Classroom realities such as student numbers, resource availability, curriculum demands and institutional support serve as moderating factors. This framework guided interpretation of the findings but does not imply causal measurement.

Figure 1: Analytical Framework Linking Teachers’ Professional Development and Classroom Practices



Note: The figure illustrates thematic relationships identified through qualitative analysis and does not imply statistical generalization.

The analytical framework was operationalized during the coding process by mapping identified themes to the four domains of instructional practice: lesson planning, pedagogy, classroom management and assessment. Contextual constraints such as class size, resources and institutional support were treated as moderating variables during interpretation. This ensured that the analytical framework was not only conceptual but also empirically grounded in the data.

## **Trustworthiness of the Study**

To ensure the rigor and credibility of the study, established qualitative trustworthiness criteria were applied. Credibility was maintained through careful data triangulation and iterative comparison of emerging themes. Dependability was ensured by maintaining a systematic and transparent coding process. Confirmability was achieved by minimizing researcher bias through consistent cross-checking of interpretations with raw data. Transferability was supported by providing rich, contextual descriptions of the research setting and participants.

## **Ethical Considerations**

Ethical approval for this study was obtained from the Ethical Review Committee of the Asian University of Bangladesh. Informed consent was obtained from all participants prior to data collection. Participants were assured of voluntary participation and their right to withdraw from the study at any stage without any consequences. Confidentiality and anonymity were strictly maintained throughout the research process. All collected data were securely stored and used solely for academic purposes.

## **FINDINGS**

Analysis of interview and observation data generated several interconnected themes that explain how teachers understand professional development and how it shapes their instructional work. While teachers reported positive changes in lesson planning, pedagogy, and assessment, the extent of implementation varied based on class size, time pressure, resource availability, and the presence or absence of follow-up support

### **Strengthened Instructional Planning**

Most teachers reported that PD helped them approach lesson planning more intentionally. Training increased their awareness of learning objectives, sequencing of activities, and the importance of preparing instructional materials. Several teachers explained that they now outline lesson steps and anticipate opportunities for student participation. Classroom observations supported these accounts. Teachers made more frequent use of visual aids, brief activities, and questioning strategies. Lessons were generally more structured and coherent than before. However, teachers also pointed to constraints. Heavy administrative work and tight schedules limited their ability to prepare detailed plans daily. In larger classrooms, teachers sometimes abandoned planned group activities and relied on whole-class instruction to maintain control.

### **Increased Use of Learner-Centered Strategies**

Teachers widely acknowledged that PD encouraged them to adopt more interactive teaching strategies. Many participants described a shift away from lecture-based instruction toward group work, guided questioning, and student discussion. Observation data revealed uneven implementation. In classrooms with manageable student numbers and available materials, teachers successfully facilitated group tasks and encouraged student responses. In overcrowded rooms, however, teachers often reverted to teacher-centered methods to ensure discipline and instructional flow. One teacher commented, "Training motivates us to try new strategies, but it is difficult when fifty or more students are in the room." This illustrates the strong influence of classroom conditions on pedagogical choices.

### **Improved Classroom Management**

Teachers consistently reported that PD strengthened their classroom management skills. Training related to positive reinforcement, clear instructions, and transition routines was especially valued. Observations showed that trained teachers maintained smoother lesson flow, provided clearer directions, and managed disruptions more effectively. Students appeared more attentive in these classrooms. However, teachers also noted that limited space, overcrowding, and insufficient materials reduced the effectiveness of certain management strategies. Maintaining engagement in congested environments remained a challenge.

## Greater Awareness of Formative Assessment

PD introduced teachers to formative assessment techniques such as probing questions, peer feedback, and informal checks for understanding. Many teachers reported asking more diagnostic questions and monitoring learning during lessons rather than relying solely on exams. Observation notes confirmed increased questioning, use of quick checks, and brief reflection activities. Nonetheless, implementation remained inconsistent. Pressure to complete the syllabus, limited time, and large student numbers often led teachers to prioritize content coverage over assessment for learning. As one teacher said, “I try to check understanding, but it takes time, so I cannot always do it.”

## BARRIERS TO IMPLEMENTATION

Across all themes, four major constraints shaped teachers’ ability to apply PD:

1. Large class sizes, which made group work and individualized support difficult.
2. Insufficient resources, including limited teaching materials and restricted physical space.
3. Curriculum pressure, which pushed teachers toward content-heavy lessons.
4. Lack of follow-up support, such as mentoring or school-based guidance.

Teachers explained that PD often presents an “ideal” classroom environment that does not match everyday realities. Without continuous guidance, many new strategies tended to fade over time.

## DISCUSSION

The findings demonstrate that professional development has a generally positive influence on teachers’ instructional planning, pedagogy, classroom management, and use of formative assessment. However, the extent of change depends strongly on the conditions in which teachers work. This section connects the study’s results with existing research and highlights the factors that shape how professional learning is enacted in classrooms.

### Professional Development Enhances Pedagogical Understanding

The study shows that teachers gained clearer understanding of lesson planning, learner-centered strategies, and assessment techniques following PD. These findings align with international research suggesting that well-designed, practice-oriented PD strengthens teachers’ instructional competence (Desimone, 2009; Darling-Hammond et al., 2017). Teachers in this study demonstrated increased awareness of interactive pedagogy and expressed greater confidence in structuring lessons. This supports the global view that continuous and reflective PD contributes to improved instructional quality.

### Classroom Realities Shape How Training Is Applied

A notable finding is the gap between PD content and the realities of classroom environments. Overcrowded classrooms, limited resources, inflexible timetables, and pressure to cover the curriculum often restricted teachers’ ability to use interactive methods. Teachers understood the value of group work or activity-based learning, yet they faced difficulty implementing these approaches when class sizes were large or space was limited. This pattern is consistent with studies in low-resource contexts, which highlight that structural constraints often limit the translation of training into practice (UNICEF, 2022; World Bank, 2020). The results indicate that PD alone is not sufficient for sustained change unless classroom conditions support innovation.

### The Importance of Sustained Support and Mentoring

Teachers repeatedly emphasized the need for ongoing support after training. Many described PD as a one-off event with little follow-up, which made it difficult to maintain new practices. Without reinforcement, teachers tended to revert to traditional methods. This finding is supported by international literature showing that

mentoring, coaching, and collaborative reflection significantly increase the likelihood that teachers will apply new strategies consistently (Hargreaves & Fullan, 2012; Timperley, 2008). The lack of such mechanisms in many Bangladeshi schools limits the long-term effectiveness of PD.

### **Training Must Be Context-Responsive**

Teachers expressed that PD often presents idealized classroom scenarios that do not reflect the complexities of their own settings. When training does not address issues such as large student numbers, limited materials, or physical space constraints, teachers struggle to apply what they have learned. This aligns with research emphasizing that PD must be grounded in local realities and offer practical, low-cost strategies that teachers can adapt within their resource constraints (Leu & Price, 2020). Context-responsive PD is more likely to result in meaningful instructional change.

### **Alignment Between Policy, School Culture, and PD**

The study highlights the critical role of supportive school environments. Teachers working in schools that encouraged experimentation, collaboration, and reflective discussion were more successful in applying new techniques. Conversely, rigid administrative expectations and limited opportunities for teamwork weakened the impact of PD. These findings echo research showing that effective PD requires alignment across policy, school leadership, and classroom conditions (Hendriks & Stoffels, 2020). Structural improvements such as time for planning, peer learning, and access to materials are necessary for sustained pedagogical change.

### **Implications and Recommendations**

The findings have several practical implications for teacher training institutions, policymakers, and school administrators seeking to strengthen primary education in Bangladesh. While PD expanded teachers' instructional awareness, its impact depended on the degree of support available within schools and the alignment between training content and classroom conditions.

#### **Align PD with Real Classroom Conditions**

Teachers frequently noted that PD sessions portrayed ideal classroom environments that did not reflect their day-to-day realities. Training programs should incorporate examples and model lessons designed for overcrowded and resource-limited settings. Activities that require extensive materials or small group arrangements should be adapted to formats that teachers can feasibly implement in typical government primary classrooms.

#### **Strengthen Follow-up Support and Mentoring**

A lack of structured post-training support emerged as one of the strongest barriers to implementation. Teachers need opportunities for coaching, peer observation, and regular feedback to sustain new strategies. Agencies such as NAPE and DPE could integrate school-based follow-up visits, mentoring networks, or peer learning groups to reinforce training content. Even low-cost strategies such as short reflection meetings or teacher-led discussion circles can significantly support classroom transfer.

#### **Promote Collaborative Professional Cultures**

Schools that encouraged teamwork and shared problem-solving were more successful in translating PD concepts into practice. Administrators should allocate time for teachers to discuss challenges, share materials, analyze student work, and plan lessons collaboratively. Establishing informal or formal professional learning communities can help teachers reflect on new practices and adapt them more confidently.

#### **Emphasize Practical Formative Assessment Techniques**

Although teachers showed greater awareness of formative assessment, implementation was inconsistent due to time pressure and large class sizes. PD should emphasize simple, low-cost strategies such as quick checks for understanding, exit cards, peer-checking routines, or short questioning cycles that can be embedded easily into daily instruction without disrupting lesson flow.

## Address Structural Barriers Through Policy Measures

Large class sizes, limited space, and shortages of teaching materials significantly hinder the use of interactive pedagogy. Teachers alone cannot overcome these constraints. Policy measures are necessary to support smaller class sizes, adequate materials, and realistic curriculum pacing. Without such system-level improvements, PD will continue to have limited and uneven impact.

## CONCLUSION

This study examined how professional development influences the instructional practices of primary school teachers in Bangladesh. Drawing on interviews and classroom observations, the findings show that PD supports improvements in lesson planning, learner-centered instruction, classroom management and formative assessment. Teachers reported greater pedagogical awareness and expressed willingness to adopt more interactive strategies in their classrooms. At the same time, the study highlights that the application of new practices is shaped by the conditions in which teachers work. Overcrowded classrooms, pressure to complete the curriculum, limited resources and the absence of follow-up support often constrained teachers' ability to implement PD concepts consistently. Although training broadened teachers' instructional knowledge, these structural and contextual barriers limited the degree to which new strategies were sustained. The results underscore that PD alone cannot transform classroom practice unless it is supported by mentoring, collaborative school environments, and policies that address classroom realities. When professional learning is context-responsive, reinforced through ongoing support, and aligned with school-level conditions, it has the potential to generate lasting improvements in teaching quality and student learning. For institutions such as NAPE and DPE, the study offers practical insights into designing PD that is both meaningful and applicable within the everyday constraints faced by Bangladeshi primary teachers.

Future research could explore long-term patterns of teacher change, examine the impact of school-based coaching models or compare PD implementation across regions. Such studies would further deepen understanding of how professional learning contributes to sustainable improvements in classroom instruction and primary education.

This study is limited by its relatively small sample size and the absence of longitudinal data or direct measurement of student learning outcomes. Future research could address these limitations by incorporating larger samples and extended observation periods.

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