
Innovative Teaching and Student Engagement in Bangladesh: Policy Implications

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Abstract

This qualitative case study investigates teaching practices and student engagement in government primary schools in southwestern Bangladesh, focusing on classes 1 to 3. Employing in-depth interviews with 14 teachers, students, and parents, the study reveals the limitations of traditional teaching methods and highlights the efficacy of innovative, participatory approaches in enhancing student engagement. Key challenges, such as inconsistent electricity supply and inadequate teacher training, impede the effective integration of technology and innovative pedagogy, particularly in rural settings. The study also uncovers socio-economic factors, like limited parental involvement, that further constrain student engagement. These findings advocate for comprehensive educational reforms encompassing pedagogical innovation, infrastructural development, and community engagement. Policymakers, educators, and parents are urged to consider these multi-faceted insights for future educational planning and policy formulation.

Keywords: Bangladesh Primary Education, Curriculum Development, Educational Policy, Hands-on Learning, Infrastructure Challenges, Pedagogical Training, Qualitative Research in Education, Real-world Materials in Education, Student Engagement, Traditional Teaching Methods.

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Introduction

Primary education serves as a cornerstone for individual development and future prospects in Bangladesh. Despite boasting a near-universal enrollment rate of 100% in primary schools—of which 70.2% are in Government Primary Schools (Annual Primary School Census, APSC 2021)—significant concerns persist over the quality of education and levels of student engagement.

Despite national efforts aimed at educational improvement, primary schools in Bangladesh grapple with enduring issues of low student engagement and antiquated teaching methods. Traditional, teacher-centered methods predominate in the classroom, often sidelining real-world applications, problem-solving activities, and student-centric approaches (Obaydullah, A.K.M., 2021; Ullah, O. and Iqbal, M., 2020). This focus has been correlated with diminished student interest and engagement, issues further compounded by challenges such as oversized classrooms and inadequate infrastructure (Jony, M., 2016; Yasmin et al., 2020; Moon et al., 2016).

This qualitative case study aims to address these critical issues by focusing on three primary objectives:

1. To assess the effectiveness of traditional teaching methods on student engagement in government primary schools in Bangladesh.
2. To evaluate the perceptions of teachers, students, and parents regarding these traditional teaching methodologies.
3. To identify and analyze obstacles—such as inadequate infrastructure and teacher training—that hamper effective teaching and student engagement.

While the educational landscape in Bangladesh has undergone significant transformations over the past decade, government primary schools continue to face considerable challenges in adopting modern pedagogical methods. This study is of critical importance as it aims to fill a significant research gap in primary education in Bangladesh, particularly at a time when instructional innovations are sorely needed.

Methodology

Research design

We employed a qualitative case study approach to investigate teaching methods in government primary schools in Bangladesh, specifically targeting classes 1 to 3. Our research aims to gauge the perceptions of instructors, students, and parents regarding

traditional teaching methods and assess their impact on student engagement and academic achievement. Additionally, we delve into the effectiveness of child-centered and digital teaching approaches within this educational setting.

Research questions

The central research question for this study is, “What factors contribute to student engagement in primary schools in Bangladesh, and how can these factors be addressed to improve educational outcomes?”

Five sub-questions were created to guide the investigation:

1. What are the current teaching approaches employed in primary schools in Bangladesh, and how do teachers, students, and parents perceive these?
2. How do these existing teaching methods impact student engagement in academic learning?
3. What aspects of practical and digital teaching methods could potentially enhance student engagement and academic achievement in the context of primary schools in Bangladesh?
4. What are the potential challenges and advantages of implementing practical and digital teaching approaches in primary schools in Bangladesh?
5. How can these methods be adapted to suit the specific context of primary schools in Bangladesh?

Participants

This study engaged a total of 14 participants from 4 government primary schools in the southwestern region of Bangladesh. Utilizing a purposive sampling method, the participants were carefully selected to include 4 students from classes 1 to 3, 7 teachers, and 3 parents of the selected students. This sampling strategy was chosen to ensure a diverse range of perspectives and experiences were captured in the study.

Data collection

Data were gathered through interview sessions with a set of 7 open-ended semi-structured questions, designed to capture the depth and breadth of participants' perceptions and experiences. These interviews were audio recorded with the participants' consent and subsequently transcribed.

Data analysis

Using a qualitative content analysis approach, as delineated by Braun and Clarke (2006), we proceeded in distinct phases. Initially, the data were familiarized through repeated

readings, then coded systematically. These codes were grouped, refined, and themes were identified, capturing the essence of participants' responses. The ATLAS.TI software was instrumental in managing and analyzing the data, facilitating a structured and rigorous approach.

Ethical consideration

The research was carried out per the ethical principles established by the American Psychological Association (2017). Informed consent was obtained from all participants prior to the interviews, and they were made aware of the study's objectives, the nature of their participation, and the procedures to safeguard their anonymity and confidentiality. All interviews of the students were taken in the presence of their teachers.

Findings

Based on in-depth interviews detailed in the Methodology section, our qualitative case study reveals intricate challenges and opportunities in traditional and participatory teaching methods in government primary schools in Bangladesh.

Traditional Teaching Methods

Teachers initiate classes with a standard routine: greeting students, reviewing lessons from previous days, and introducing the day's topics. They utilize various methods to engage students, such as reading aloud, exercises, and group activities. To assess student progress, teachers employ Q&A sessions, individual feedback, and written evaluations, even offering additional support to struggling students. However, these traditional approaches often fall short in maintaining student engagement, a finding consistent with previous research (Jony, M., 2016; Yasmin et al., 2020).

Challenges in Student Engagement

Teachers encounter numerous issues affecting student engagement, notably irregular attendance and varying levels of concentration among students. These challenges are exacerbated by external factors like family obligations and financial constraints. Amplifying the lack of parental involvement, a teacher with over a decade of experience lamented, "When we call for guardian meetings, many parents do not even join and later say they had work in the field and did not have time." Specifically, these external factors create an environment where traditional teaching methods are less effective in engaging students.

Shortcomings of Traditional Methods

Both teachers and parents favor more interactive methods and cite the limitations of traditional lecture-based teaching. In their statements, there's a strong emphasis on the need for integrating technology to bolster educational quality, helping students to retain and apply knowledge more effectively in the real world.

Participatory Teaching Methods

Practical teaching techniques, involving the use of real-world materials and interactive activities, have shown a marked improvement in engaging students. Echoing the efficacy of participatory teaching methods, a student enthusiastically shared, "I enjoy reading when our teacher teaches with stories and provides real-life examples, such as fish, birds, and other tangible materials." This statement is supported by triangulated data from teachers, parents, and students, thus strengthening the validity of this finding.

Role of Technology

While teachers praise technology for its potential to enhance learning outcomes, they also acknowledge the practical challenges in its implementation. Multimedia resources such as projectors and digital devices have been observed to increase student engagement and learning outcomes significantly. However, these benefits are often constrained by infrastructural limitations, particularly in rural settings. These challenges point to an urgent need for balanced and realistic planning in integrating technology into the educational landscape.

Parental Concerns

Highlighting the challenges of incorporating technology in education, a concerned parent remarked, "My child spends more time watching cartoons and playing games than actually learning from the tablet," underscoring the need for a balanced technological approach in education.

Summary Tables

Tables 1 and 2 provide a succinct summary of the study's key findings, aiming to offer a foundational understanding for future educational strategies and targeted interventions.

Table 1: Improvement in Student Engagement

This table delineates the positive aspects and challenges of traditional and participatory teaching methods, based on our triangulated findings.

Innovative Teaching Methods	Improved Aspects of Student Engagement
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Hands-on Activities	Active Participation, Skill Development
Real-world Materials	Contextual Understanding, Curiosity
Storytelling	Emotional Engagement, Imagination
Technology Integration	Interactive Learning, Information Retention

Table 2: Challenges Faced by Teachers

This table identifies specific aspects of teaching that are impacted by various challenges, offering insights into areas requiring targeted intervention.

Challenges	Affected Aspects of Teaching
Limited Electricity Access	Use of Technology, Consistency
Inadequate Teacher Training	Methodology, Effectiveness
Insufficient Materials	Lesson Planning, Student Engagement
Classroom Size	Personalized Attention, Classroom Management

Our findings underscore that while traditional methods serve a foundational role, they are often inadequate in sustaining student engagement. More interactive techniques, such as hands-on activities and real-world materials, have proven to be more effective. However, challenges such as limited access to electricity and inadequate teacher training present significant barriers to these advancements.

Discussion

This study focuses on primary schools in Bangladesh and offers critical insights into the traditional and participatory teaching methods, their strengths, limitations, and potential for enhancement through technology. These findings are particularly salient for educators, parents, and policymakers.

Traditional teaching methods, while foundational, are increasingly being eclipsed by more interactive, technology-assisted methods. The newer approaches amplify student engagement and make educational material more relevant, thus aligning with the demands of a modern educational landscape.

However, the full-scale implementation of these promising approaches is constrained by several challenges. Inconsistent electricity supply and inadequate infrastructure are major roadblocks, especially in rural settings (Jony, M., 2016). These challenges underscore the urgent need for policymakers to invest in infrastructural advancements.

The study also identifies a gap in teacher training for effectively integrating technology into education (Yasmin et al., 2020). Addressing this gap will require specialized

professional development programs aimed at enhancing teachers' technical skills and instructional techniques.

Our findings reveal a unique challenge in rural areas—limited parental involvement due to work commitments in the field, which are essential for their livelihood. This lack of involvement is not a result of disinterest but rather an intricate issue linked to socio-economic conditions. Policymakers should consider flexible, innovative ways to engage parents without conflicting with their work schedules, such as virtual meetings or community gatherings during non-working hours.

Parents have expressed concerns about the excessive recreational use of digital devices by their children. This emphasizes the need for a balanced approach to technology use, one that maximizes educational benefits while minimizing distractions.

This study advocates for an integrated education system that synergizes traditional and participatory methods. It highlights the need for infrastructural improvements, specialized teacher training programs, and guidelines for balanced technology use. As Bangladesh adapts to a rapidly changing educational landscape, the insights from this study can guide future policy and practice.

Recommendations

Based on the findings of this qualitative research, the following recommendations aim to enhance teaching practices, student engagement, and technology integration in classrooms:

Teaching Methods and Approaches

- Prioritize child-centered learning strategies that emphasize active involvement, critical thinking, and problem-solving.
- Adopt interactive and practical teaching methods, incorporating authentic materials, hands-on experiences, and visual aids.
- Promote student collaboration and engagement through collaborative learning spaces and group activities.

Professional Development for Teachers

- Develop continuous professional development opportunities focusing on innovative instructional methods and technological literacy.
- Introduce training modules simulating real classroom scenarios, enabling hands-on practice for tech integration.

- Cultivate a culture of ongoing education to ensure teachers stay current on educational trends and developments.

Technology Integration in Schools

- Guarantee access to essential technological tools in all classrooms, such as digital devices, projectors, and educational software.
- Implement training and support programs for teachers to successfully integrate technology.
- Establish comprehensive guidelines for technology use, covering topics like internet safety and responsible tech usage.
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Parental Engagement

- Facilitate regular communication and progress reports to parents, and offer flexible timings for parent-teacher interactions, especially in rural areas where work commitments may interfere.
- Educate parents on their crucial role in supporting their child's learning, providing resources for home-based educational activities.
- Implement consistent communication channels between teachers and parents to boost student outcomes.

Infrastructure and Resources Development

- Prioritize infrastructural investments, especially in underserved areas, focusing on stable electricity, modern digital tools, and internet connectivity.
- Allocate sufficient budgetary resources for purchasing and maintaining essential educational materials and equipment.

Research and Evaluation

- Encourage further research to explore the efficacy of various teaching techniques and technology integration strategies.
- Conduct regular evaluations of educational strategies and technology projects to identify areas for improvement.
- Foster collaborations among various stakeholders to drive innovation and knowledge sharing.

To encapsulate the key points discussed, the following table summarizes the primary areas of focus, actions to be taken, and stakeholders involved.

Table 3: Summary of Key Recommendations for Enhancing Primary Education in Bangladesh

This table serves as a quick reference guide, summarizing the study's key recommendations and identifying involved stakeholders. It is particularly useful for policy-makers, educators, and school administrations.

Category	Specific Actions	Stakeholders Involved
Teacher Training	Introduce modern pedagogical methods	Policy Makers, School Administrators
Infrastructure	Ensure electricity access for tech use	Government, School Administrators
Curriculum Development	Incorporate hands-on activities, real-world materials	Teachers, Curriculum Designers
Student Engagement	Use interactive methods like storytelling	Teachers
Policy Making	Prioritize actions based on study implications	Policy Makers
Parental Engagement	Facilitate flexible parent workshops; Develop communication channels	Parents, Teachers, School Administrators

Conclusion

This study illuminates the critical aspects of teaching practices and student engagement in government primary schools in Bangladesh. It strongly advocates for a transition from traditional, lecture-based teaching to more interactive, technology-enhanced methods for enriching student engagement. A significant takeaway is the immediate need for better teacher training and resource allocation to fully harness the advantages of technology in classrooms (Yasmin et al., 2020).

Collaborative initiatives involving educators, policymakers, parents, and technology providers are indispensable for driving necessary educational reforms. While the study provides invaluable localized insights, it has its limitations in scope, underscoring the need for more extensive research.

As Bangladesh navigates through an era of rapid technological advancements, the evolution of its primary education system remains a pivotal concern. This study serves as a foundational step in that direction, indicating that through targeted strategic efforts,

Bangladesh can substantially elevate the educational experiences for its coming generations.

Future research opportunities

This study establishes a foundational understanding of teaching practices and student engagement in Bangladesh's government primary schools while acknowledging its limitations. To build upon this research, the following avenues should be prioritized:

1. **Expanded Sample and Stakeholder Views:** To gain a more comprehensive understanding, future research could involve a broader range of participants, including students of different grades, teachers with varying levels of experience, and policymakers at different levels of governance.
2. **Methodological Mix:** Utilizing a mixed-methods approach that integrates qualitative interviews with quantitative data can offer a more nuanced understanding of the educational landscape.
3. **Tech Impact and Sustainability:** As technology's role in education continues to grow, studies that assess its long-term impact on various educational outcomes, including student engagement and learning efficacy, are essential.
4. **Parental Involvement:** Given the unique challenges in rural areas related to parental involvement, future research should explore innovative methods for engaging parents who have work commitments that prevent their active participation in educational matters.
5. **Real-Time Feedback:** Incorporating real-time feedback mechanisms for both students and educators can allow for adaptive changes in teaching methods and curricula, thus staying responsive to the needs of a fast-evolving educational environment.

By focusing on these research directions, we can develop a more comprehensive understanding of the existing challenges in Bangladesh's government primary schools. This, in turn, can inform targeted interventions and policy reforms aimed at improving the quality of education and student engagement.

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Declaration of interest

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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