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Learning-Oriented Curriculum for Rural Bangladesh

Golam Rabby¹, Maisha Anjum Mahdiya² and Sree Bidhan Chakraborty³

- 1) Undergraduate Student, Department of Education, Government Teachers' Training College, Sylhet, Bangladesh, Email: rabby141100@gmail.com
- 2) Undergraduate Student, Department of Nursing Science, Begum Rabeya Khatun Chowdhury Nursing College, Sylhet, Bangladesh, Email: anjummaisha007@gmail.com
- 3) Master of Philosophy, Assistant Professor, Department of Education, Government Teachers' Training College, Sylhet, Bangladesh

Abstract

Curriculum plays a vital role in shaping social and economic progress through education, yet rural areas of Bangladesh continue to face challenges in delivering a curriculum that reflects local realities. This study explores how the national curriculum aligns with the socio-cultural and economic needs of rural communities, focusing on the Sylhet division as a case example. A qualitative research design was adopted to capture the perspectives of key stakeholders, including teachers, parents, students, and educational experts. Data were gathered through in-depth interviews and focus group discussions, ensuring a broad and contextually grounded understanding the variables' knowledge on the phenomena. Thematic analysis was used to interpret the data through coding and decoding, allowing patterns and recurring concerns to emerge across groups. Findings indicate that the existing curriculum often emphasizes rote learning and theoretical knowledge, while neglecting critical thinking, practical skills, and problem-solving abilities that are essential for rural livelihoods. Participants consistently highlighted the need for improved teacher training, greater community involvement in curriculum design, and more flexible policies that priorities local relevance. The study affirms that a learning-oriented curriculum can enhance student engagement and community development if supported by appropriate resources, policy reforms, and sustained collaboration among stakeholders.

Keyword: Learning-Oriented Curriculum, Rural Education, Educational Reform, Local Relevance in Education.

Introduction

Education is a fundamental driver of social and economic progress, serving not only as a pathway for individual advancement but also as a foundation for community development. In the context of developing countries, education holds a particularly significant role in reducing poverty, improving health outcomes, and enhancing overall quality of life (UNESCO, 2017). Bangladesh has recognized education as a constitutional right and has invested heavily in expanding access at both the primary and secondary levels (Ministry of Education, 2020). Despite such progress, concerns remain about the quality and relevance of education,

particularly in rural areas. Rural Bangladesh presents a unique socio-economic landscape, shaped by agricultural dependence, limited infrastructure, and resource constraints (Rahman & Ahmed, 2022). For rural students, education should ideally serve two interrelated purposes: to provide opportunities for further education and employment, and to equip learners with skills relevant to their immediate environments. However, the current national curriculum is highly centralized and largely uniform, offering limited space for contextual adaptation. This centralization often results in a mismatch between classroom knowledge and the lived realities of rural learners (Hossain, 2020). The dominance of rote learning and examination-oriented practices is a defining feature of Bangladesh's education system. Students are typically assessed based on memorization of textbook content, which undermines the development of analytical, critical thinking, and problem-solving skills (Chowdhury, 2021). Teachers, constrained by prescribed syllabi, large class sizes, and lack of training in innovative pedagogy, often resort to lecture-based instruction. As a result, education becomes an exercise in content reproduction rather than meaningful engagement. Research shows that this approach contributes to student disengagement, absenteeism, and eventually dropout, which is particularly pronounced in rural schools (Alam & Haque, 2019). The problem is compounded by structural challenges, including inadequate teacher preparation, limited access to teaching resources, and insufficient infrastructure (Nath, 2016). Many schools in rural areas lack libraries, laboratories, and facilities for practical learning, which restricts opportunities for experiential education. Parents, many of whom possess limited formal education, frequently express concerns that the curriculum does not prepare their children for productive futures within their communities (Khan, 2018). Global evidence suggests that contextually relevant curricula produce stronger learning outcomes. For instance, in Kenya and Uganda, the integration of local knowledge, vocational skills, and practical applications into school curricula enhanced both engagement and achievement among rural students (Tikly & Barrett, 2011). Similarly, (UNESCO, 2020) has emphasized the importance of aligning education systems with socio-economic realities in order to achieve Sustainable Development Goal 4, which calls for inclusive and equitable quality education.

In the context of Bangladesh, a learning-oriented curriculum one that prioritizes critical thinking, practical knowledge, and problem-solving holds potential to bridge the gap between theory and practice. Such a curriculum can not only improve student engagement but also contribute to sustainable community development. By addressing local realities, education can prepare learners to apply knowledge in meaningful ways that improve both individual and collective wellbeing. This study focuses on exploring how such reforms can be achieved in rural Bangladesh by engaging with the perceptions of teachers, parents, students, and educational experts.

The curriculum in rural secondary schools in Bangladesh faces a significant problem of irrelevance. While it is designed to promote national educational goals, it often disregards the socio-cultural and economic contexts of rural learners (Rahman, 2017). The heavy reliance on theoretical knowledge, rote learning, and standardized assessments undermines the ability of students to apply what they learn in practical settings. Teachers acknowledge their limitations in adapting lessons to local contexts, and parents express dissatisfaction with the lack of immediate utility in education (Chowdhury, 2021). Teacher preparation and professional development remain inadequate. Training programmed often focus on theoretical pedagogy without equipping teachers to facilitate learner-centered and context-specific approaches (Nath, 2016). Moreover, resource limitations including shortages of textbooks, technological aids, and infrastructure reinforce reliance on outdated methods of instruction. Policy frameworks priorities standardization, leaving little flexibility for rural schools to adapt curricula to community needs (Hossain, 2020). The consequences are evident in poor learning

outcomes, lack of motivation, and high dropout rates in rural areas (BANBEIS, 2019). Students often leave school without acquiring practical competencies, which restricts their opportunities for livelihood improvement and broader participation in social and economic life. These problems indicate a pressing need for curriculum reform that is both learning-oriented and contextually grounded.

The rationale for our study emerges from the urgent requirement to align the education system in rural Bangladesh with the realities of learners' lives. A one-size-fits-all curriculum does not serve the diverse needs of rural students, who face socio-economic challenges distinct from those in urban settings (Rahman & Ahmed, 2022). In rural areas, education must not only provide pathways to higher education but also equip students with practical skills for agriculture, small enterprises, and community development. Adopting a learning-oriented curriculum is vital. Such an approach places emphasis on active engagement, critical thinking, and the application of knowledge to real-world contexts. Research indicates that learning-oriented systems foster creativity, independence, and resilience, qualities essential for success in a rapidly changing world (Biggs & Tang, 2011). In rural Bangladesh, these qualities can help learners navigate challenges such as poverty, unemployment, and climate vulnerability. Our study is also timely. Although Bangladesh has achieved significant gains in literacy and access, issues of quality and relevance persist (World Bank, 2019). The government has introduced reforms under the National Education Policy, but implementation challenges, especially in rural areas, limit their impact (Ministry of Education, 2020). This study provides empirical evidence on stakeholder perspectives, which can guide policymakers in designing reforms that are grounded in lived realities.

Our research addresses the following questions: A) How can the curriculum in rural Bangladesh be revised to align more closely with the socio-cultural and economic needs of local communities? B) What are the perceptions of stakeholders (students, teachers, parents, and educational experts) regarding the relevance and effectiveness of the current curriculum in rural Bangladesh? C) What changes in teacher training, resources, and policy are necessary to create a curriculum that fosters practical knowledge, critical thinking, and problem-solving in rural students?

From an academic perspective, it contributes to existing literature on curriculum reform by centering the rural context of Bangladesh. Much of the scholarship has focused on access and equity, leaving gaps in understanding the role of curriculum relevance in shaping educational outcomes (Nath, 2016; Rahman, 2017). Practically, the findings offer actionable insights for policymakers, educators, and development organizations. By highlighting the perspectives of teachers, parents, students, and experts, the study provides a comprehensive evidence base for reforms. Recommendations regarding teacher training, curriculum adaptation, and resource investment can inform government initiatives and international development programmers. Socially, the research underscores the transformative potential of education when aligned with local realities. A learning-oriented curriculum can enhance rural livelihoods, strengthen community resilience, and support Bangladesh's progress towards national development goals (UNESCO, 2020).

Our study focuses on secondary education in rural Bangladesh. It considers the curriculum as experienced by teachers, students, parents, and educational experts. The research employs qualitative methods, particularly interviews and focus group discussions, to gather stakeholder perspectives. While the findings are context-specific, they hold wider implications for education policy and practice at the national level.

The introduction has established the importance of aligning the curriculum in rural Bangladesh with the socio-cultural and economic realities of learners. The current system, dominated by rote learning and standardization, fails to provide the practical skills and critical thinking

abilities necessary for sustainable development. A learning-oriented curriculum offers a pathway to bridge this gap, fostering both individual growth and community resilience. By engaging with the perspectives of key stakeholders, this study seeks to provide evidence-based recommendations for transforming rural education into a driver of meaningful progress.

Literature Review

Theoretical Frameworks on Curriculum and Learning

Curriculum theory provides the foundation for understanding the relationship between education and social development. (Tyler, 1949) argued that curriculum should be guided by clearly defined objectives, selection of learning experiences, organization of instruction, and evaluation of outcomes. While his model influenced global curriculum design, critics highlight its linear and prescriptive nature, which limits responsiveness to local contexts (Kelly, 2009). Constructivist theories, particularly those of (Piaget, 1970) and (Vygotsky, 1978), emphasize that learning occurs through interaction and active engagement rather than passive absorption of knowledge. Piaget stressed developmental stages of cognition, while Vygotsky highlighted the social and cultural dimensions of learning through the concept of the “zone of proximal development.” These perspectives underline the importance of contextualized and interactive approaches, directly challenging the dominance of rote learning. (Freire’s 1970) critical pedagogy further enriches this discourse by framing education as a process of empowerment. He rejected the “banking model” of education, where students passively receive knowledge, and advocated for dialogical and problem-posing methods that cultivate critical consciousness. In rural Bangladesh, where socio-economic inequalities shape educational access, Freire’s ideas remain relevant in reimagining curricula that empower learners to address real-world problems. (Biggs and Tang, 2011) advanced the concept of constructive alignment, emphasizing the importance of aligning learning outcomes, teaching methods, and assessments. Their approach supports a learning-oriented curriculum where students actively construct knowledge and demonstrate higher-order skills. Similarly, (Bruner, 1996) advocated for discovery learning and scaffolding, which encourage exploration and practical application.

Global Perspectives on Curriculum Reform

Across the world, countries have attempted to reform curricula to make them more relevant, learner-centred, and skills-oriented. (UNESCO, 2020) emphasizes that education must prepare learners for both global competitiveness and local challenges, balancing academic knowledge with life skills, creativity, and problem-solving.

In sub-Saharan Africa, several initiatives have attempted to contextualize education to local realities. In Uganda, curriculum reforms included agriculture, health, and entrepreneurship to address the immediate needs of rural communities (Altinyelken, 2010). In Kenya, integration of indigenous knowledge and vocational training improved student engagement (Tikly & Barrett, 2011). However, these efforts also faced challenges such as teacher preparedness and resource shortages, illustrating parallels with Bangladesh. South Asia provides further insights. India introduced the National Curriculum Framework 2005, which emphasized constructivist pedagogy and contextual relevance (NCERT, 2005). However, uneven implementation across rural and urban areas hindered its effectiveness (Sriprakash, 2012). Nepal also introduced child-centred reforms but struggled with alignment between curriculum goals and classroom practices (Carney & Bista, 2009).

Rural Education and Curriculum Relevance

Rural education has distinctive challenges that influence curriculum effectiveness. Researchers highlight the rural-urban divide in access, quality, and outcomes (Arnold et al., 2005). Rural learners often face economic hardship, long distances to schools, and limited exposure to diverse career paths. As a result, a uniform curriculum that disregards these realities often alienates students and contributes to higher dropout rates (Howley & Howley, 2014).

Curriculum relevance is critical in addressing these disparities. Locally relevant curricula that integrate community knowledge and vocational skills increase both student engagement and community support. For example, in rural Australia, community-driven curricula linked schooling to agricultural practices and local industries, strengthening rural development (Roberts, 2014). In the context of Bangladesh, rural communities rely heavily on agriculture, small-scale trade, and informal employment (World Bank, 2019). A curriculum that prepares students with practical skills for these sectors would directly benefit both learners and their communities. However, the current system prioritizes academic knowledge aimed at competitive examinations, creating a disconnect between school learning and real-life applications (Rahman, 2017).

Bangladesh's Education System and Curriculum Development

Bangladesh has made significant strides in expanding access to education, with near-universal primary enrolment and improved gender parity (BANBEIS, 2019). The National Education Policy 2010 introduced reforms aimed at inclusivity, equity, and modernization (Ministry of Education, 2020). However, implementation challenges remain, particularly in rural areas. The curriculum at the secondary level is highly centralized, with textbooks and assessments determined by the National Curriculum and Textbook Board (NCTB). This centralization leaves little room for contextual adaptation (Hossain, 2020). Moreover, the curriculum emphasizes theoretical knowledge and examination preparation rather than practical competencies (Chowdhury, 2021). Research indicates that rural schools struggle to deliver the curriculum effectively due to shortages of trained teachers, inadequate infrastructure, and limited resources (Nath, 2016). Parents frequently express concerns about the curriculum's relevance, noting that it does not equip their children with employable skills (Khan, 2018). Several donor-supported initiatives, including BRAC's non-formal schools, have attempted to address these gaps by emphasizing life skills, participatory pedagogy, and community involvement (Chowdhury & Rose, 2004). These models provide valuable lessons for mainstream curriculum reform, demonstrating the benefits of flexible, learner-centred approaches.

Rote Learning, Critical Thinking, and Practical Skills

Rote learning is one of the most criticized aspects of Bangladesh's education system. Students are expected to memorize textbooks and reproduce content in examinations, which undermines creativity, problem-solving, and application of knowledge (Alam & Haque, 2019). This emphasis on memorization reflects both systemic pressures from high-stakes examinations and teachers' limited training in innovative pedagogy. Research consistently shows that rote learning produces surface-level understanding, while critical thinking requires active engagement and reflection (Halpern, 2014). In contrast, learning-oriented curricula encourage inquiry, collaboration, and application of concepts to real-world situations. (Biggs and Tang, 2011) emphasize that constructive alignment between outcomes, pedagogy, and assessment fosters deeper learning. Practical skills are equally important in rural contexts. (UNESCO, 2020) stresses that education must equip learners with skills for employment, entrepreneurship, and sustainable livelihoods. In Bangladesh, a curriculum that integrates agriculture, vocational training, and digital literacy could enhance both personal and community development (Rahman & Ahmed, 2022).

Teacher Training and Professional Development

Teachers are central to curriculum implementation. However, in Bangladesh, teacher training remains inadequate, particularly in rural areas (Nath, 2016). Pre-service and in-service programmes often focus on theoretical content without equipping teachers to apply learner-centred methods (Hossain, 2020). Teachers frequently report difficulties in fostering critical thinking due to lack of training, resources, and institutional support (Chowdhury, 2021).

International evidence shows that effective professional development is ongoing, context-specific, and collaborative (Darling-Hammond et al., 2017). In Finland, continuous teacher training and autonomy contribute to high-quality education (Sahlberg, 2015). In Kenya and Uganda, lack of investment in teacher capacity hindered the success of curriculum reforms (Altinyelken, 2010).

Resource Constraints in Rural Schools

Resource limitations are a persistent barrier in rural Bangladesh. Many schools lack libraries, laboratories, computers, and sufficient classroom space (BANBEIS, 2019). These shortages restrict opportunities for practical learning and innovation. Teachers often rely solely on textbooks, reinforcing rote methods (Rahman, 2017). Studies indicate that adequate resources significantly enhance student learning. For example, access to science laboratories improves understanding of concepts, while digital resources expand opportunities for interactive learning (OECD, 2016). In rural areas of developing countries, community participation and government investment have proven effective in addressing resource gaps (Tikly & Barrett, 2011).

Policy and Standardization in Education

Bangladesh's education policies emphasize national unity and standardization, which limit flexibility for local adaptation (Ministry of Education, 2020). While standardization ensures equity in access, it undermines contextual responsiveness. Rural schools often struggle to implement the prescribed curriculum due to socio-economic disparities, yet they are assessed by the same standards as urban schools (Hossain, 2020). Policy frameworks need to balance national goals with local flexibility. (UNESCO, 2017) highlights the importance of decentralized approaches that empower schools to adapt curricula. Countries such as Finland and Canada demonstrate how policy frameworks can provide both national coherence and local autonomy (Sahlberg, 2015; Levin, 2008).

The literature reveals several gaps. Firstly, while numerous studies critique rote learning and resource shortages in Bangladesh, limited research explores how curriculum can be redesigned to align with socio-cultural and economic realities of rural communities (Rahman, 2017). Secondly, few studies capture the voices of multiple stakeholders' teachers, parents, students, and experts in shaping curriculum reform. Finally, much of the existing scholarship focuses on access and equity, leaving questions of relevance and effectiveness underexplored. Our study addresses these gaps by providing empirical evidence on stakeholder perceptions of curriculum relevance in rural Bangladesh. It contributes to the literature by grounding curriculum reform debates in the lived realities of rural communities, offering recommendations for teacher training, resource allocation, and policy frameworks. By adopting a learning-oriented lens, it also aligns with global calls for education systems that promote critical thinking, problem-solving, and lifelong learning.

Methodology

Our research study employed a qualitative research design to examine how the curriculum in rural Bangladesh can be revised to align more closely with the socio-cultural and economic needs of communities, as well as to understand the perceptions of key stakeholders and the necessary reforms in teacher training, resources, and policy. Qualitative research is widely acknowledged as particularly effective in capturing human experiences, perspectives, and meanings in depth (Creswell & Poth, 2018; Merriam & Tisdell, 2016). Unlike quantitative methods, which focus on numerical data and generalization, qualitative approaches provide space for rich, context-specific insights that reveal complexities of social realities (Denzin & Lincoln, 2018).

Our study was conducted in rural areas of the Sylhet division, a region chosen for its unique socio-cultural and economic profile. Sylhet is characterized by significant rural populations, a

reliance on agriculture, and substantial migration-driven remittances, which shape community aspirations for education (Sultana, 2020). At the same time, rural schools in this division face infrastructural challenges, a shortage of trained teachers, and limited resources (Hossain, 2020). Selecting Sylhet ensured that the study would capture both the opportunities and barriers associated with educational reforms in rural Bangladesh. Conducting the research in this setting was appropriate because it reflected the lived realities of those most affected by curriculum challenges. The findings are therefore grounded in authentic experiences and are more relevant for informing policy and practice in similar contexts.

A purposive sampling approach was employed to identify participants. Purposive sampling is widely recognized as suitable for qualitative studies where the goal is not statistical representation but rather depth and relevance of information (Patton, 2015). The sample comprised four key stakeholder groups: at first teachers: Fifty secondary school teachers (IDIt-01 to IDIt-50; FGDt-01 to FGDt-50) were included, as they are directly responsible for implementing curriculum policies in classrooms. Secondly, parents: Twenty-five parents (IDIp-01 to IDIp-25; FGDp-01 to FGDp-25) participated, given their role in shaping community expectations of education and supporting children's learning. Thirdly, educational experts: Ten experts (IDIex-01 to IDIex-10; FGDex-01 to FGDex-10) were consulted to provide broader insights on curriculum policy, teacher training, and educational reform. Finally, students: Twenty-five students (FGDs-01 to FGDs-25) contributed perspectives on the relevance of the curriculum and the type of learning they considered meaningful.

This diversity of participants ensured triangulation of perspectives, which enhanced the validity and credibility of the study (Tracy, 2010). The sample size was sufficient to achieve data saturation, a point at which new data ceased to generate novel insights (Guest, Namey, & Chen, 2020).

Our data were collected using two primary qualitative methods: in-depth interviews and focus group discussions. These methods were selected because they facilitated an in-depth understanding of stakeholder experiences and encouraged participants to share their perceptions in their own words.

In-depth Interviews: In-depth interviews were conducted with fifty teachers, twenty-five parents, and ten educational experts. Interviews allow for detailed exploration of individual perspectives and provide opportunities to probe for deeper understanding (Kvale & Brinkmann, 2015). Teachers shared their experiences of implementing the national curriculum in rural classrooms, parents reflected on its relevance to local life, and experts provided insights into the structural and policy-related aspects of education. Each interview lasted between 25 and 35 minutes and followed an in-depth guide. This format ensured consistency across interviews while allowing flexibility for participants to elaborate on issues that were particularly important to them (Bryman, 2016). The interviews were conducted in Bangla to ensure participants felt comfortable expressing themselves. They were subsequently transcribed and, where necessary, translated into English for analysis.

Focus Group Discussions (FGDs): Fifteen FGDs were conducted involving teachers, parents, educational experts, and students. Focus groups are effective for generating collective perspectives and uncovering shared experiences (Morgan, 1997). Each FGD comprised 7 to 9 participants and lasted approximately 75 to 90 minutes. FGDs were particularly valuable in this study because they facilitated discussion among stakeholders, enabling participants to challenge, agree, or expand upon each other's views. This interactive dynamic generated richer data than individual interviews alone could provide. For example, students' perspectives on practical learning were often reinforced by parents' comments, creating a layered understanding of stakeholder expectations.

All sessions were recorded with consent, and field notes were taken to capture non-verbal cues and group dynamics.

Ethical conduct was a central priority throughout the research process. Our study followed the ethical guidelines set out by the British Educational Research Association (BERA, 2018).

Our data were analyzed using thematic analysis, a flexible method widely used in qualitative research for identifying, organizing, and reporting patterns within data (Braun & Clarke, 2006). Thematic analysis was appropriate because it enabled systematic examination of large volumes of textual data and allowed findings to remain grounded in participants' voices.

We analysis followed six steps as suggested by (Braun and Clarke, 2006): Firstly, Familiarization with Data: Transcripts were read multiple times to gain an overall understanding of the content. Secondly, Generating Initial Codes: Key features of the data were coded systematically using NVivo software, which supported efficient organization. Thirdly, Searching for Themes: Codes were grouped into potential themes, reflecting patterns across interviews and FGDs. Fourthly, Reviewing Themes: Themes were refined by comparing them with the coded extracts and the overall dataset. Fifthly, Defining and Naming Themes: Clear definitions were assigned to each theme to capture their essence. And finally Producing the Report: The final analysis integrated these themes with illustrative quotes, linking them to the research questions.

Result and Discussion

Findings from In-Depth Interviews

After reviewing our data this section, we present the results of the in-depth interviews with 50 secondary school teachers (IDIt-01 to IDIt-50), and 25 parents (IDIp-01 to IDIp-25).

Curriculum Relevance to Local Realities

One teacher (IDIt-12) commented: *"Most of the examples in the textbooks are about city life—traffic jams, shopping malls, technology."* Teachers felt that the disconnect makes learning abstract and disengaging. They wished to see school knowledge that complements household livelihoods. IDIp-07 stated: *"If the curriculum taught about agriculture, fisheries, and small businesses, it would help our children contribute to the family income in the future."*

Practical Skills and Problem-Solving over Rote Learning

Teachers explained that national examinations reinforce rote methods, leaving little room for innovation. IDIt-34 remarked: *"Exams push students to memories, but when they leave school, they cannot solve even small problems in their community. The system rewards recitation, not understanding."* IDIt-09 provided a vivid example: *"I asked my students to calculate the interest on a small loan taken from a local moneylender. Despite knowing the formula from the textbook, they could not apply it to the real scenario."* Parents linked this issue to the economic value of education.

Parents consistently urged for lessons that integrate basic accounting, small enterprise skills, and agricultural techniques. They also highlighted the need for vocational learning to prepare their children for local employment opportunities. Teachers added that life skills education should form part of the curriculum. IDIt-03 and IDIt-46 stressed the importance of communication, health knowledge, and problem-solving for daily life. They argued that such skills would enhance not only individual capability but also collective resilience within rural communities. While teachers supported these ideas, they also acknowledged systemic barriers. IDIt-20 explained: *"We teach students to memories because the exams demand it, and exams demand it because the curriculum and policy are designed that way. Until policy changes, it is very hard to break the cycle."* This illustrates how the dominance of rote learning is structurally embedded within assessment systems.

Teacher Training and Community Involvement in Curriculum Reform

The third sub-theme highlights the importance of teacher capacity and community engagement in successful curriculum reform. Teachers admitted that they lack training to adapt lessons to local conditions. IDIt-21 explained: *"We teachers want to make lessons relevant, but we don't have training or guidance on how to connect the content with students' lives."* Several teachers (e.g., IDIt-15) observed that professional development opportunities are limited and often centered in urban areas, leaving rural educators with minimal access.

Teachers also believed that closer collaboration with parents would strengthen student learning. IDIt-08 explained that children achieve more when home and school reinforce one another. However, current arrangements rarely create such communication channels. Both groups stressed that teacher training must include methods for contextualizing curriculum, while policy must devolve authority to allow adaptation at local levels. IDIt-37 summarized: *"Even if we want to make the curriculum practical and locally relevant, we need support from the government in terms of resources, training, and flexibility in policy. Otherwise, it is impossible to sustain these changes."*

Perceptions of Curriculum Relevance to Rural Realities

Teachers explained that textbooks draw heavily on urban references. This creates barriers for rural pupils, who struggle to relate to the content. IDIt-17 noted: *"In science classes, we teach about traffic control systems and industrial machinery, but our children have never seen such things. If examples reflected farming, rivers, and local markets, the lessons would be clearer."* Other teachers observed that this urban emphasis diminishes student motivation. IDIt-32 stated: *"Students ask why they must learn about things they never encounter. This weakens their interest and makes them think education is not useful for their lives."*

Parents echoed this concern. Many linked curriculum irrelevances with limited livelihood opportunities for their children. IDIp-11 commented: *"Our children study day and night, but nothing in their books helps them with agriculture or running small businesses. How will this education feed their families?"* Several parents (e.g., IDIp-03, IDIp-18) suggested that lessons should integrate farming methods, animal care, or food preservation, which would provide both academic and practical value.

Perceptions of Curriculum Effectiveness in Supporting Learning Outcomes

Teachers explained that the system rewards memorization rather than comprehension. IDIt-25 remarked: *"Student's memories definitions, poems, and formulas, but they cannot apply them in real situations. The curriculum measures memory, not understanding."* IDIt-41 gave a practical example: *"One student scored well in mathematics but could not calculate the price of goods in the market. This shows how little practical skill the curriculum develops."* Several teachers (e.g., IDIt-03, IDIt-07) emphasized the lack of space for creativity, questioning, or problem-solving in classroom practice.

Experts agreed that the current curriculum does not meet the demands of the modern world. IDIex-02 remarked: *"The curriculum is outdated. It does not cultivate problem-solving, digital literacy, or entrepreneurship, all of which are essential for today's rural youth."* Experts also underlined the negative influence of the examination system. IDIex-09 commented: *"Because the assessment system is rigid, teachers are forced to prepare students for examinations through drilling and memorization. This perpetuates rote culture."*

Perceptions of Systemic Barriers and Pathways for Reform

Teachers acknowledged that they often lack preparation to contextualize the curriculum. IDIt-21 noted: *"We want to make learning practical, but we lack the training to adapt lessons. We simply follow textbooks because that is what we know."* Several (e.g., IDIt-12, IDIt-33) explained that pressure to complete the syllabus discourages innovation. Teachers expressed strong interest in professional development programmes that would equip them with skills to design context-based lessons.

Experts offered a structural analysis. IDIex-01 observed: *“Curriculum development in Bangladesh is heavily centralized. Schools have no authority to adapt content to their contexts, which is why local needs remain invisible.”* IDIex-05 added: *“Unless schools are given flexibility, curriculum reform will remain theoretical. Local adaptation is key.”* Experts further emphasized that resource allocation is critical. IDIex-07 argued: *“Even the best-designed curriculum will fail if schools lack trained teachers, teaching aids, and supportive infrastructure.”* IDIex-10 concluded: *“Curriculum reform is not only the job of policymakers. Teachers, parents, and communities must all be partners if we want sustainable change.”*

Findings from Focus Group Discussions

This section presents the results from 15 focus group discussions (FGDs) involving 50 secondary school teachers (FGDt-01 to FGDt-50), 10 educational experts (FGDex-01 to FGDex-10), and 25 students (FGDs-01 to FGDs-25).

Teacher Training and Professional Development for Learning-Oriented Pedagogy

Teachers shared that most professional development activities are exam-centered and highly theoretical. They explained that the focus remains on completing the syllabus and preparing students for assessments rather than promoting active learning. As FGDt-07 expressed: *“We are trained to cover the curriculum and deliver examination results, but we are not guided on how to develop students’ reasoning or practical abilities.”* Many teachers, such as FGDt-11 and FGDt-29, explained that they felt constrained by rigid textbooks and teaching guidelines, which limit creativity. They strongly advocated for training in student-centered approaches, classroom innovation, and techniques to incorporate local realities into lessons. FGDt-45 reinforced this by noting: *“Training should help us integrate local examples in mathematics and science so that students can relate, but we never receive such guidance.”*

Educational experts emphasized that professional development must be continuous, contextually relevant, and decentralized. FGDex-03 explained: *“One-off training sessions have limited impact. Teachers require sustained professional development that allows them to practice new methods.”* Experts also highlighted the importance of peer learning opportunities.

Resource Needs for Effective Implementation of a Skills-Based Curriculum

Teachers repeatedly explained that the scarcity of teaching aids undermines their ability to translate theory into practice. FGDt-23 reflected: *“We are asked to teach scientific concepts only with chalk and talk. Without simple laboratories or models, students cannot grasp how theory applies in life.”* They also stressed the problem of overcrowded classrooms, which restrict the use of group work or problem-solving activities. As FGDt-38 put it: *“Managing sixty students in one class leaves no room for practical engagement or discussion.”*

Students openly expressed frustration about the absence of opportunities for experiential learning. FGDs-09 stated: *“We read about experiments in science but never see them. We only memories instead of understanding.”* Several students also called for resources such as libraries, internet access, and community-based projects, which they believed would stimulate curiosity and develop problem-solving skills. FGDs-21 explained: *“With a library or computer, we could learn independently instead of depending only on notes.”*

Experts argued that resource provision is not simply an add-on but a fundamental precondition for meaningful reform. FGDex-01 compared resource scarcity to: *“Planting seeds in dry soil; without water and nourishment, no growth is possible.”*

Policy Reforms for Sustainable and Context-Sensitive Curriculum Development

Teachers expressed that the rigid nature of education policy prevents flexibility in teaching. FGDt-15 observed: *“We follow the book exactly, even if we know that local examples would help students. Policy does not allow us to adjust.”* They urged for policies that grant greater autonomy to schools and teachers, as well as opportunities for educators to contribute to curriculum design.

Students emphasized that policies must address the exam-heavy system, which currently dominates classroom practice. FGDs-14 noted: *“Teachers rush to finish the syllabus because everything depends on the exam. If exams encouraged problem-solving, learning would change.”*

Experts offered deeper reflections on policy challenges. FGDex-04 stated: *“Curriculum reform is often superficial because the structural issues of centralization and exam dependency remain unresolved.”*

Discussion

This discussion interprets the findings in relation to the third research question: What changes in teacher training, resources, and policy are necessary to create a curriculum that fosters practical knowledge, critical thinking, and problem-solving among rural students in Bangladesh? The perspectives gathered from teachers, parents, students, and education experts highlight that meaningful curriculum reform requires integrated attention to teacher preparation, resource provision, and policy transformation.

Teachers in this study voiced a strong need for improved professional training that goes beyond preparing students for examinations. Their current training is largely theoretical, offering limited guidance on how to promote creativity or analytical skills. Both teachers and parents agreed that the overemphasis on rote memorization restricts curiosity and engagement, particularly in rural classrooms where contextual teaching is scarce. These concerns are consistent with (Hossain, 2020), who observed that Bangladeshi teacher training often prioritizes content delivery over critical pedagogy. (Darling-Hammond, 2017) further argued that ongoing, practice-based professional development leads to more effective teaching than isolated workshops. The teachers’ call for peer collaboration reflects idea of “communities of practice”, where professional learning deepens through shared reflection and experimentation. A recurring challenge raised by participants was the acute shortage of educational resources. Teachers explained that inadequate facilities such as laboratories, libraries, and teaching aids—limit their ability to deliver practical lessons. Parents and students echoed this concern, highlighting disparities between rural and urban schools. Experts agreed that resources are not optional but essential for developing problem-solving and critical thinking skills. They also suggested using local assets such as farms or workshops to link classroom learning with community life. This approach supports findings from Ghana, which demonstrated that integrating local resources fosters applied learning. The argument aligns with Freire’s (1970) concept of education as a dialogue between knowledge and lived experience.

Another key theme concerns the rigidity of national education policy. Teachers criticized the centralized curriculum that prioritizes uniformity over contextual relevance, while parents and students lamented the excessive focus on examinations. Experts identified centralization as the root of limited flexibility and innovation, arguing for decentralized curriculum authority and participatory decision-making. This aligns with (Chowdhury, 2021) who noted that national standardization in Bangladesh often overlooks local diversity, and with (Levin, 2008) who warned that centralized systems restrict responsiveness. Reforming assessment to include formative and creative components reflects view of assessment as a tool for learning, not merely evaluation. Similarly, demonstrated that community involvement in governance enhances policy responsiveness an idea echoed by parents and local stakeholders in this study. Overall, the findings confirm the interdependence of teacher training, resources, and policy. (Levin, 2008) framework of educational change explains that lasting reform requires coherence across these elements. Isolated interventions such as training without resources or policies without local engagement are unlikely to succeed. Instead, systemic reform that aligns professional development, equitable resource allocation, and participatory policy frameworks can transform rural education.

In conclusion, this study highlights that the transformation of rural education in Bangladesh must be holistic. Empowering teachers through continuous training, ensuring equitable access to learning resources, and creating flexible, inclusive policies will enable the development of a curriculum that promotes critical thinking, creativity, and practical problem-solving preparing students not only for examinations but for meaningful participation in their communities.

Conclusion

Our study examined the development of a learning-oriented curriculum for rural Bangladesh with the objective of understanding how education can be reformed to reflect local realities and prepare learners for meaningful participation in community and national development. It investigated three areas: the alignment of the curriculum with socio-cultural and economic contexts, the perceptions of stakeholders regarding the relevance and effectiveness of the current curriculum, and the changes required in teacher training, resources, and policy to foster practical knowledge, critical thinking, and problem-solving. The research used qualitative methods, including in-depth interviews and focus group discussions with teachers, parents, students, and educational experts. This approach provided rich insights into the lived experiences of rural communities and offered a holistic view of the challenges and opportunities in curriculum reform. The findings confirmed that the existing curriculum remains highly centralized, heavily exam-driven, and largely detached from the socio-economic conditions of rural life. Teachers consistently observed that the curriculum encourages rote memorization rather than meaningful engagement with knowledge. Parents voiced concern that what their children learn in school does not adequately prepare them to meet the practical demands of daily life in rural communities. Students described a lack of opportunities to think critically, apply knowledge, or develop skills relevant to local livelihoods. Educational experts reinforced these concerns and highlighted structural barriers such as limited resources, inadequate teacher training, and rigid policy frameworks.

Three key themes emerged. First, teacher training is insufficient to prepare educators for student-centred, critical, and practical approaches to learning. Teachers receive little guidance on how to integrate local culture, economic activities, or problem-solving exercises into classroom teaching. Second, schools in rural areas lack resources, including basic facilities, libraries, science laboratories, and teaching materials. These deficiencies limit opportunities for hands-on learning and reinforce dependence on rote methods. Third, education policy emphasizes standardization and central control, leaving little room for schools and communities to shape curricula according to their specific needs. The study concludes that curriculum reform in rural Bangladesh requires a fundamental reorientation of priorities. Education must move beyond the pursuit of examination results and instead nurture skills, creativity, and critical capacities. The curriculum must reflect local contexts, enabling students to see clear links between what they learn in school and how they can apply it to improve their lives and communities. Teachers must receive training and support to adopt active pedagogical methods, while schools must be provided with adequate resources. Policy frameworks must balance national standards with local flexibility, ensuring that communities have a voice in shaping what children learn.

Our study contributes to the ongoing debate about education reform in Bangladesh by highlighting the importance of stakeholder perspectives. It shows that meaningful curriculum reform is not solely a technical or administrative process; it is also a social and cultural undertaking that requires the active participation of teachers, parents, students, and experts. The evidence demonstrates that when education is grounded in local realities and aligned with community needs, it can become a powerful driver of development, equity, and empowerment. Our study recommends a series of practical, policy, and research-based measures to improve the quality and relevance of rural education in Bangladesh. Teachers should receive continuous

professional development that encourages interactive, learner-centred teaching rather than short, theoretical workshops. Collaboration through peer networks and the integration of local knowledge such as agricultural practices, crafts, and community experiences can make lessons more meaningful and engaging. Classrooms need to move away from rote memorization towards student-centred learning, using discussions, projects, and practical demonstrations rooted in familiar contexts. Strengthening partnerships between schools, parents, and communities through regular meetings and shared resources can enhance the real-world application of education. Policy reform should decentralize the curriculum to allow local adaptation, promote fair resource allocation, and ensure assessment methods recognize creativity and problem-solving rather than simple recall. Teacher training institutions should embed critical pedagogy within their programmes, linking professional growth to classroom innovation. Future research should evaluate the long-term outcomes of such reforms, explore community-led educational initiatives, and prioritize students' voices to ensure their needs and aspirations shape curriculum development. Together, these efforts can build an inclusive, relevant, and empowering education system that nurtures critical thinking and social equity in rural Bangladesh.

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