

Reforming Basic English and Maths Education in Developing Countries: A Comparative Study on Bangladeshi Textbooks

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Accepted for Publication: 2024

Published Date: January 2024

Abstract

In this research paper, I examine the strengths and weaknesses inherent in the Bangladesh national curriculum textbooks for second and third Grade in English and maths, with the broader aim of mitigating educational disparities in other developing countries. Utilising a comparative approach, I will compare the Bangladeshi textbooks with those of Nigeria and France, offering an assessment across different socio-economic contexts. The paper highlights the educational disparities in Bangladesh, stemming from economic inequalities, gender norms, and infrastructure challenges. The focus on these government textbooks uncovers critical issues such as the ethnic biases of characters, limited pedagogical diversity, and the absence of essential resources like dictionaries. In this paper I will include recommendations to reform the textbooks to enhance their quality and equity. Ultimately, this research strives to pave the way for a more inclusive and accessible education system that bridges the existing gaps and ensures quality learning opportunities for all students.

Keywords: education, textbooks, Bangladesh, developing economies

1. Introduction

In the context of mitigating educational disparities, in developing countries such as Bangladesh, the pivotal role of a high-quality national curriculum textbook cannot be overstated. The primary objective of this paper is to discern and analyse the strengths and weaknesses inherent in the Bangladesh national curriculum textbooks for second and third grades, with a specific emphasis on the subjects of mathematics and English, as a case study of developing countries with diverse ethnic and linguistic sub-populations. Employing a comparative methodology, I will compare my analysis with textbooks from a comparably multi-ethnic and multilingual developing country, Nigeria, and a developed country, France, offering a

comprehensive comparative assessment of educational materials across varied socio-economic contexts.

Educational disparities in Bangladesh are multifaceted, with economic inequality standing out as a significant factor. In rural areas, where many families grapple with poverty, children face barriers to accessing quality education¹. The concentration of limited resources, including schools and qualified teachers, in urban areas further widens the educational gap. Gender inequality compounds this issue, despite efforts to enhance girls'

¹ Md. Moniruzzaman jafar.emran, Sheikh Jafar Emran, et al. "Education and Inequality in Rural Bangladesh: A Longitudinal Study," *Asia-Pacific Journal of Rural Studies*, Vol. 31, 1, (2021)

education. Societal norms and economic pressures contribute to lower enrollment and higher dropout rates among girls, perpetuating disparities. Infrastructure challenges, characterised by inadequate school facilities and resources, pose additional hurdles to the effectiveness of the education system. Natural disasters, such as floods and cyclones, exacerbate these existing disparities by disrupting schooling. Political instability and governance issues have intermittently impacted the education system, with inconsistent policies and implementation hindering progress.

The impact of robust textbooks is evident in their role in standardising education across the nation². Meticulously designed textbooks would ensure equitable access to essential knowledge for students, irrespective of their backgrounds or geographical locations, effectively narrowing the gap for access to educational opportunities. The emphasis on accurate, current, and well-organised content not only elevates the overall quality of learning materials but also supports educators in delivering effective lessons. Recognizing the pivotal role of teachers, comprehensive textbooks act as invaluable guides, offering structured curricula, teaching methodologies, and assessment tools—particularly crucial in areas with limited teacher training and resources³. Aligned with national goals, these textbooks should further reflect the values and culture of the country, contributing to the holistic development of students in accordance with societal needs. In summary, a top-tier national curriculum textbook should emerge as a foundation for fostering an inclusive and effective education system, instrumental in overcoming educational disparities and providing a consistent, high-quality learning experience for all students, regardless of their background or location. In Chapter One, I aim to show the challenges faced by Bangladesh, and draw comparisons with other countries. This comparative analysis will show the critical need for a high-quality textbook. In Chapter Two, my focus shifts to an examination of the strengths and weaknesses inherent in the Bangladeshi English and

Maths textbooks. I will extend this analysis by comparing them to Nigerian and French textbooks, offering a comprehensive understanding of diverse educational approaches. Finally, in Chapter Three, I present viable solutions to address these challenges, providing concrete examples to illustrate each of these solutions and, in turn, offering a pathway toward an improved educational framework in Bangladesh.

My methodology is comparative: I have selected the national curriculum textbooks of Nigeria and France for a comparative approach. I chose Nigeria because it is also a large multi-ethnic, multi-lingual, developing country and has a similar GDP to Bangladesh's. It also has a diverse landscape with large rural and urban populations that resemble the diversity of Bangladesh. Conversely, the choice of France, a developed and fairly homogenous nation (with the exception of recent immigrants), provides a compelling contrast. The inclusion of mathematics in the analysis aims to unravel and compare the diverse methodologies employed by different countries in imparting this fundamental discipline.

2. Context

Bangladesh is a developing country in South Asia, bordering on India, Myanmar and the Bay of Bengal. It gained independence in 1971 after a liberation war against Pakistan. Previously, it was part of British India until 1947 when the Indian subcontinent gained independence.

With a population of just under 170 million people, it's one of the most densely populated countries in the world. The economy has been steadily growing, with a GDP of \$460bn⁴, and it's primarily driven by the textile and garment industry, agriculture, and remittances from the large number of Bangladeshis working abroad.

Bangladesh faces challenges such as poverty, political instability, and natural disasters due to its geographical

² Tim Oates, "Why Textbooks Count" *Cambridge Assessments*, Vol 10 (2014)

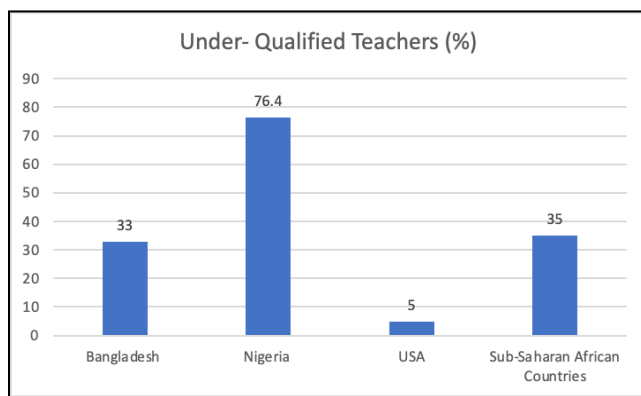
³ Linda Dove, *Bangladesh Teacher Training*, (Paris: UNESCO, 1984)

⁴ "Bangladesh GDP", *Worldometer*, ((2022)

location. However, it has made significant progress in areas like healthcare and education in recent years.

A well-crafted government textbook would be important in the context of Bangladesh. It would serve as a tool for students, to foster independent learning and provide teachers with a valuable resource to enhance their teaching methods. A robust textbook can significantly influence students' academic understanding and their engagement with the world around them.

Figure 1:



Bangladesh suffers from a high number of underqualified teachers within the education system, as shown in Figure 1⁵. Hiring under-qualified teachers has negative effects on various aspects of education⁶. Students taught by such teachers often struggle academically because these teachers find it difficult to explain subjects well. This can lead to lower engagement and a less effective learning environment. Classroom management becomes an issue, affecting the overall educational experience. Long-term consequences include limiting students' future opportunities and perpetuating educational inequalities. The presence of underqualified teachers can also lead to higher turnover rates. Hence, a quality textbook becomes ever more crucial in classrooms led by underqualified teachers. When educators fall short, the reliance on independent studying rises, and a

well-crafted textbook becomes a key tool for students to learn the materials on their own. It not only facilitates self-directed learning but also serves as a guide for underqualified teachers, providing them with a structured resource to enhance their teaching effectiveness.⁷

Lack of attendance among primary school-level children in developing countries stems from a complex interplay of factors⁸. Poverty often forces families to prioritise economic needs over education, as the associated costs of schooling, including uniforms and books. Additionally, child labour necessary for family subsistence prevents children from attending school, when children contribute to family income through work rather than attend school. Geographic challenges, such as the distance and inaccessibility of schools, especially in rural areas, further hinder attendance, particularly for girls. Cultural norms, traditions emphasising gender roles, insufficient infrastructure, health issues, and discrimination based on various factors compound the problem. Conflict, political instability, and inadequate government policies also play roles in disrupting this primary level education. Until problems like these are eradicated, students still may not be allowed to or cannot go to school, however, with a quality textbook, children can try self learn the curriculum, even to grasp some concepts like basic addition and subtraction. In Figure 2, we can once again see the disparity between the developing and developed countries. Bangladesh⁹, Nigeria¹⁰ and Jamaica¹¹ is seen to be below the worldwide average¹² of primary attendance, whereas France¹³, Romania¹⁴ and the USA¹⁵ is above it.

⁵ Marianna McMurdock, "Facing Regional Shortages, US Schools Now Employing 160,000 'Underqualified' Teachers", (2022) electronic address, when it was accessed

⁶ Eva Jenker, Arye Hillman, "Educating Children in Poor Countries", *International Monetary Fund*, Issue 33 (2004)

⁷ "Survey on Children's Education in Bangladesh 2021" *Govt. Bangladesh, UNICEF* (2023)

⁸ "Nigeria National Education Profile 2018 Update", *World Bank* (2018)

⁹ "Share of children not enrolled in primary education in Jamaica from 1984 to 2019", *Statista*, (2023)

¹⁰ "Primary Education", *UNICEF*, (2023)

¹¹ "France Education Statistics", *CEIC*, (2016)

¹² "Romania Education Statistics", *CEIC*, (2016)

¹³ "101 American School Statistics: 2023 Data, Trends & Predictions", *Research.com*, (2023)

⁵ Marianna McMurdock, "Facing Regional Shortages, US Schools Now Employing 160,000 'Underqualified' Teachers", (2022) electronic address, when it was accessed

⁶ Richard M. Ingersoll, "The Problem of Underqualified Teachers: A Sociological Perspective", Vol 78, 2 (2005)

Figure 2:

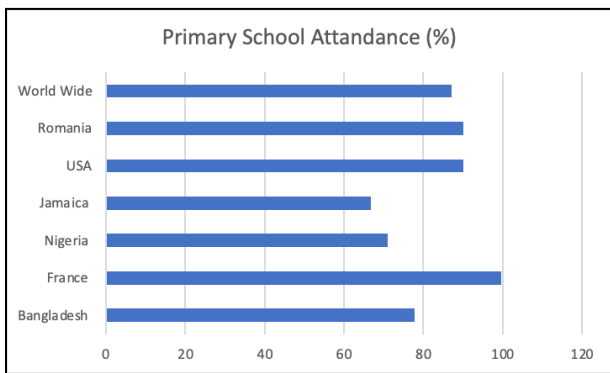


Figure 3:

Year	Teacher to Student Ratio
1971	1:43
1981	1:55
1990	1:63
2000	1:57
2010	1:44
2020	1:28

The teacher-to-student ratio in Bangladesh (see Figure 3) has a significant impact¹⁶. In oversized classes, individualised attention decreases, making it challenging for teachers to address the diverse needs of each student. This can lead to reduced engagement and understanding among students, as the teacher may struggle to provide sufficient support and feedback. Classroom management becomes more difficult, potentially resulting in disruptions that further hinder the learning environment. Moreover, in such settings, students may be less likely to actively participate in class discussions, leading to a less dynamic educational experience. Figure 3 shows the teacher to student ratio in Bangladesh¹⁷ over the last 50 years. There is a pattern of increase and decrease, with recent years showing a noteworthy reduction in the proportion difference. Despite this positive trend, the data for 2020

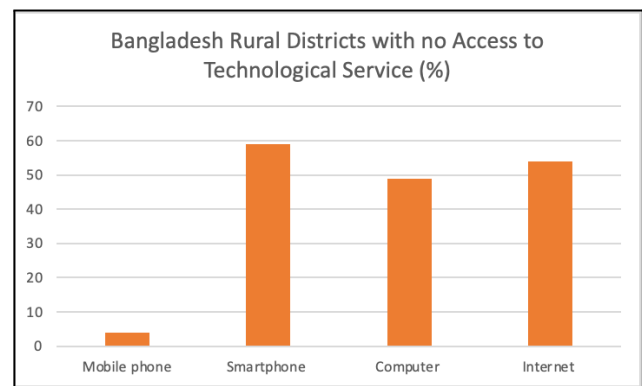
¹⁶ Katie Diaz, Cassie Fett, et al., “The Effects of Student- Teacher Ratio and Interactions on Student/Teacher Performance in High School Scenarios”, *Cornell Education*, (2003)

¹⁷ Muhammad Salahuddin, “Progress and Problems of Primary Education in Bangladesh: A Snapshot of 50 Years”, *Education, Health & Behavior Studies Student Publications*. 8. (2021)

indicates only a minimal reduction of 15 students since 1971, in stark contrast to the more substantial 35-student decrease observed from 1990. This highlights the challenges of large class sizes and reinforces the importance of quality textbooks as essential tools in such scenarios. A robust textbook

Figure 4:

empowers teachers to assign work to students and students are not over reliant on teachers for help as they manage the class.



The findings from a recent survey in 2020 conducted in rural districts of Bangladesh highlight a significant lack of access to certain technologies among the local population¹⁸. This is a concern, especially in the context of education. If students encounter difficulty in understanding class material, the absence of devices or the internet hinders their ability to seek additional help.

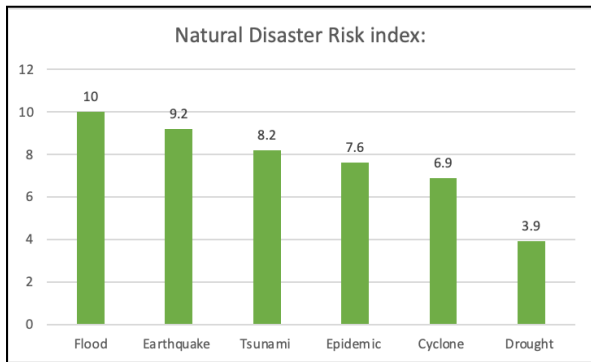
In light of this challenge, emphasising the importance of a good national curriculum textbook becomes imperative. A well-crafted textbook would ensure that students have comprehensive learning resources at the ready, reducing the stress associated with lack of technological access and providing a reliable tool for independent learning.

Figure 5 displays the risk index for natural disasters in Bangladesh¹⁹. It is a comprehensive

¹⁸ “BIGD survey: Half of all rural households have no access to computer, internet”, *Dhaka Tribune*, (2020)

¹⁹ “Risk index of natural disasters in Bangladesh for 2022, by type” *Statista*, (2022)

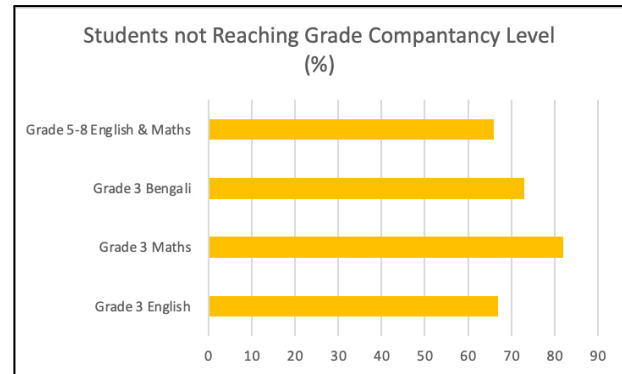
Figure 5:



outcome of a risk assessment that considers various indicators to determine the likelihood of a natural disaster. Bangladesh is the seventh most affected country globally by extreme weather events²⁰, impacting approximately 20 million children due to environmental shocks driven by climate change. These events force children to stop attending school and stay at home amidst adversity. Therefore resilient educational resources are crucial, enabling students to continue their studies independently when confronted with the disruptions caused by these disasters, ensuring the continuity of their education despite challenging circumstances.

In Figure 6, the data showing students not meeting grade competency levels for various subjects in Bangladesh is alarming²¹. The challenges outlined earlier, such as limited access to technology, large class sizes, and the impact of natural disasters, likely contribute

Figure 6:



significantly to these concerning statistics. Once again, these numbers underscore the critical and pressing need for the provision of high-quality textbooks. A reliable and effective textbook is essential in addressing the gaps in understanding and competency among students, offering a solution to improve their academic performance and bridge the existing educational disparities.

2. Analysis Of Textbooks

This chapter analyses grade two government textbooks from Bangladesh, with a comparative analysis using textbooks from Nigeria and France, with a particular focus on the subjects of mathematics and English. Through this comparative analysis, we aim to identify strengths and weaknesses in these textbooks, and what can be done to improve them.

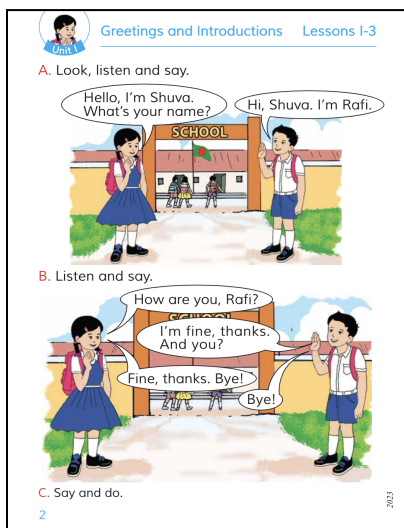
One significant aspect of the Bangladesh government textbooks that warrants attention is the representation of characters. In both the mathematics and English textbooks, characters are consistently depicted as light-skinned individuals. In a country like Bangladesh, where colorism is a prevalent and deeply embedded issue²², the choice to portray characters with lighter skin tones can reinforce harmful societal norms. It may

²⁰ Rafiqul Islam, Md Mahmudul Hoque, “Trade-Off Between Schooling and Labor for Children: Understanding the Determinative Factors Among Rural Households in Bangladesh”, *Front. Sociol.*, (2022)

²¹ “Weakness of Grade Three Students in Bangla: Causes and Remedies”, *National Academy for Primary Education*, (2019) UNICEF (2020)

“Bangladesh: Ensuring Education for all Bangladeshis”, *The World Bank* (2016)

²² Md. Rifat-Ur-Rahman, Subeda Khatun, et al., “Oppressed Within the Oppressed: The Patriarchal Hegemonic Discourse of Colourism on Dalit Women in Shahjadpur, Sirajganj, Bangladesh” *Sage Journals*, (2021)



provide a misrepresentation that being of a lighter skin tone is more appealing, as that is what can be seen in the books, exacerbating existing biases²³. In contrast, most students in Bangladesh have darker skin, as seen in the typical classroom setting²⁴. This discrepancy between textbook characters and the student population can perpetuate harmful beauty standards and affect children's self-esteem and self-identity. By showcasing characters with a variety of skin tones, the possibility for misinterpretation would be reduced, and children should be able to relate personally to the textbook



characters, thereby engaging more in lessons. By contrast, the Nigerian textbook makes a commendable effort to portray diverse Nigerian students, effectively eliminating biases, racial

²³ Aftab Ahmed, "Combatting Colourism in Bangladesh" *The Daily Star*, (2023)

²⁴ Jason Beaubien, "Floating Schools' Make Sure Kids Get To Class When The Water Rises" *NPR*, (2018)

stereotypes, and colorism. Similarly, the French textbooks exhibit a commitment to representing students through their two main characters. This deliberate approach contributes to fostering a more inclusive and equitable educational environment.

In the Bangladeshi textbooks, there is a different pedagogy between the mathematics and English textbooks. The English textbook predominantly uses a rote learning approach, featuring multiple exercises of the same style. These exercises often involve copying and tracing words or word recognition through pictures. While rote learning can be beneficial to some extent, an over-reliance on this method without offering a variety of exercises may lead to student disengagement. Moreover, the absence of diverse exercises and techniques in the textbook can pose challenges to students with varying learning preferences and styles²⁵. In contrast, the mathematics textbook provides a diverse range of exercises and additional pages for practice. This variety not only enhances students' understanding but also keeps them interested and motivated to learn²⁶.

By comparison, the Nigerian English Grade 2 textbook, stands out for its wide range of exercises, incorporating spoken, written, puzzles, rhymes, and songs, providing diverse ways for children to learn each topic. Another commendable aspect observed in the Nigerian textbooks is the strategic inclusion of revision pages, occurring at regular intervals—precisely every six chapters. This deliberate choice aligns with sound pedagogical principles, recognizing the importance of periodic review²⁷ for students to reinforce and consolidate their learning. These revision pages, serving as effective tools for revisiting and solidifying

²⁵ "8 Types of Learning Styles | The Definitive Guide" *Bay Atlantic University*, (2021)

²⁶ Frank Romanelli, Melody Ryan, et al., "Learning Styles: A Review of Theory, Application, and Best Practices" *American Journal of Pharmaceutical Education*, (2019)

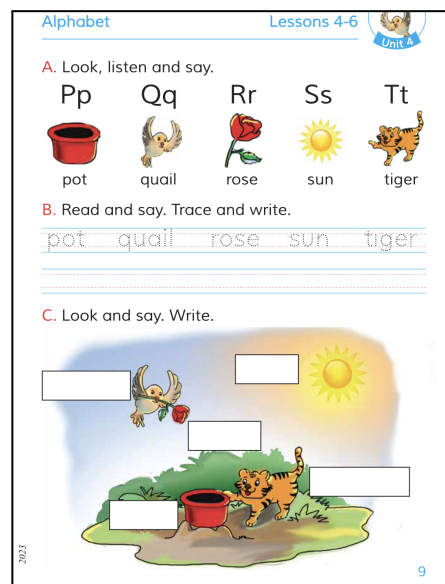
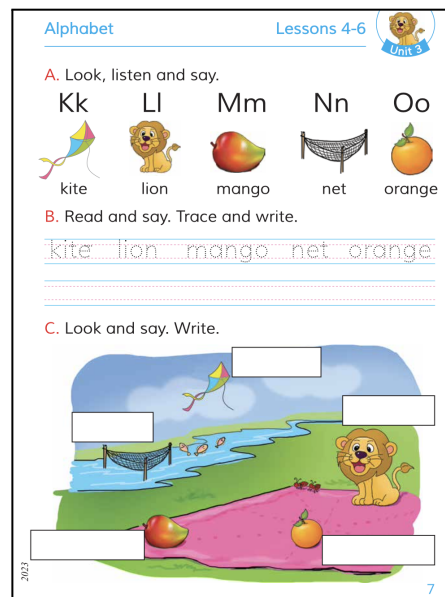
²⁷ Orla P. Barry, Eleanor O' Sullivan, et al. "Periodic review sessions contribute to student learning across the disciplines in Pharmacology" *Journal of the Scholarship of Teaching and Learning*, Vol. 15. 1, (2015), pp. 38 - 56.

acquired knowledge, contribute significantly to the overall effectiveness of their studying.

The French textbooks, like the Nigerian ones but unlike the Bangladeshi textbooks, offer a diverse array of exercises. The French educational materials employ a strategic learning approach, wherein the content and grammar are initially introduced. Subsequently, students engage in exercises facilitated by the textbook and audio resources. This progressive method includes a transition to independent practice, where students apply their learning without audio support. This comprehensive strategy enhances the effectiveness of the learning process. An additional notable distinction among the three textbooks lies in the utilisation of the French language within the French English textbook. Instructions for students, as well as translations from French to English, are presented in French. While this approach may prove beneficial in certain contexts, I believe that the exclusive use of English in the Bengali and Nigerian textbooks is more advantageous for students. This choice encourages students to rely on and enhance their proficiency in the target language, rather than relying on their native language for comprehension.

The pedagogical approaches employed in both the Nigerian and French textbooks showcase commendable effectiveness. The integration of revision pages, a notable feature, could be significantly enhanced in the Bangladeshi textbooks, particularly in the realm of English as it has already been loosely incorporated in the maths textbook. While the addition of an audio system may pose challenges in the Bangladeshi context, given potential limitations in technology access, an alternative solution could involve providing phonetic spellings of audio content in teacher handouts. This adaptation ensures that students can still benefit from auditory learning without relying on extensive technological resources.

Bangladeshi English textbook:



These pages from the english textbook are an example of the similar exercises provided- and the rote learning style. The textbook repetitiously presents exercises of the ‘Look, Listen and Say’, type as well as ‘Read and Say. Trace and Write’. By repetitiously including the same exercises, students are not able to adopt new learning methods.

By contrast, these pages from the French English textbook show a unique and adaptable method of teaching. The use of listening, reading and writing exercises shows a diverse range of learning methods.

There is, There are / Exprimer la possession

Mini Mémor


There's = There is + nom au singulier } • Il y a
 There are + nom au pluriel }
 Whose book is it? } It's Tommy's book. • C'est le livre de Tommy.
 À qui est ce livre? }
 my + mon, ma, mes } her + son, sa, ses (quand le possesseur est féminin)
 your + ton, ta, tes, votre, vos } our + notre, nos (quand le possesseur est masculin)
 his + son, sa, ses } their + leur, leurs

1 Écoute la piste et répète. Puis complète la phrase avec *there is* ou *there are*.

- an interesting book in grandfather's chest.
- interesting books at school.
- extraordinary stories in the book.
- a funny ghost in the story.

2 Regarde les dessins, écoute la piste et répète. Puis complète le dialogue en employant *my* ou *your*.

Exemple : Tommy : ----- cellphone is red, ----- cellphone is yellow.
 → My cellphone is red, your cellphone is yellow.



- Tommy : ----- anorak is blue, ----- anorak is green.
- Julie : ----- book is purple, ----- book is orange.
- Tommy : ----- walkman is red, ----- walkman is black.
- Julie : ----- socks are grey, ----- socks are green.

There is, There are / Exprimer la possession

3 Écoute la piste et répète. Puis complète les phrases en employant *his* ou *her*.

- Julie has got a green anorak; it's ----- anorak.
- Tommy has got a red cellphone; it's ----- cellphone.
- Julie has got an orange book; it's ----- book.
- Tommy has got green socks; they are ----- socks.

4 Relie chaque question à sa réponse.

- Whose chest is it? • a. It's Julie's walkman.
- Whose walkman is this? • b. He is Tommy's dog.
- Whose dog is Brownie? • c. It's Tommy's book.
- Whose book is this? • d. It's grandfather's chest.

5 Complète chaque phrase avec l'adjectif possessif qui convient.

Exemple : You've got an orange boat, it's ----- boat.
 → You've got an orange boat, it's *your* boat.

- She's got a red T-shirt, it's ----- T-shirt.
- I've got a brown car, it's ----- car.
- We've got a white dog, it's ----- dog.
- They've got a pink house, it's ----- house.

LE COIN DES CURIEUX

L'Écosse est le pays des fantômes. D'abord, parce que c'est un pays celtique et que les Celtes, qui ont peuplé l'Écosse, l'Irlande, le pays de Galles et la Bretagne, ont beaucoup d'imagination. Ensuite, parce que l'Écosse est une terre de brumes propices à l'apparition des fantômes et autres êtres surnaturels. Enfin, l'Écosse est aussi le pays du très bon whisky. Et les automobilistes qui ont eu un accident alors qu'ils étaient seuls sur la route prétendent avoir été effrayés par un fantôme qui traversait...

Nigerian English textbook:

These pages from the Nigerian English textbook show a superior diverse range of exercises with games, reading and writing. None of the exercises are exactly the same. This helps keep students engaged.

D Have fun

How many days can you find?

W	T	H	U	R	S	D	A	Y	I	T
E	A	B	C	D	U	E	F	G	H	T
D	H	I	J	K	N	L	A	C	B	S
N	J	F	R	Y	D	A	Y	D	F	E
E	M	O	N	D	A	Y	P	G	E	S
S	E	M	N	O	Y	P	Q	P	O	A
D	D	C	S	A	T	U	R	D	A	Y
A	B	Q	R	S	F	R	I	D	A	Y
Y	A	Y	Z	G	H	I	U	U	W	Y

E Sing


Thirty days has September

Thirty days has September,
 April, June, and November;
 February has twenty-eight alone,
 All the rest have thirty-one,
 Except leap-year, that's the time
 When February's days are twenty-nine.

How many are there? Copy and fill in the blanks.

- There are ----- fish.
- There are ----- oranges.
- There are ----- bags.
- There are ----- books.
- There are ----- keys.
- There are ----- bananas.

C What do they have?



Bangladeshi Maths textbook:

Division

When 3 children divide 12 biscuits evenly, each child gets 4 biscuits. We write this calculation in the mathematical sentence below.

$$12 \div 3 = 4$$

Twelve Division Three Equal Four

This kind of calculation is called Division, and the symbol " \div " is called the "Division sign".

Because $4 \times 3 = 12$, division is an inverse of multiplication!

There are 18 chocolates. If 6 children share these chocolates equally then how many chocolates will each child get?

Write a mathematical sentence and calculate it.

Let's use objects around us, prepare same question and calculate it.

Total number of chocolates + Number of groups = Number of chocolates in each group

----- chocolates

Addition: 2 Digit Numbers

2.3 Do ourselves

1. Do additions.

(1) $\begin{array}{r} 29 \\ + 43 \\ \hline \end{array}$	(2) $\begin{array}{r} 56 \\ + 27 \\ \hline \end{array}$	(3) $\begin{array}{r} 38 \\ + 34 \\ \hline \end{array}$	(4) $\begin{array}{r} 19 \\ + 25 \\ \hline \end{array}$	(5) $\begin{array}{r} 76 \\ + 18 \\ \hline \end{array}$
(6) $\begin{array}{r} 43 \\ + 37 \\ \hline \end{array}$	(7) $\begin{array}{r} 18 \\ + 52 \\ \hline \end{array}$	(8) $\begin{array}{r} 24 \\ + 26 \\ \hline \end{array}$	(9) $\begin{array}{r} 44 \\ + 9 \\ \hline \end{array}$	(10) $\begin{array}{r} 76 \\ + 8 \\ \hline \end{array}$
(11) $\begin{array}{r} 9 \\ + 83 \\ \hline \end{array}$	(12) $\begin{array}{r} 5 \\ + 57 \\ \hline \end{array}$	(13) $\begin{array}{r} 31 \\ + 9 \\ \hline \end{array}$	(14) $\begin{array}{r} 45 \\ + 5 \\ \hline \end{array}$	(15) $\begin{array}{r} 8 \\ + 82 \\ \hline \end{array}$

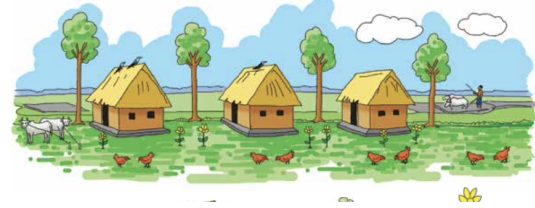
2. Do additions.

(1) $28 + 37$	(2) $49 + 23$	(3) $55 + 16$	(4) $64 + 27$
(5) $47 + 45$	(6) $46 + 36$	(7) $35 + 29$	(8) $13 + 78$
(9) $57 + 13$	(10) $38 + 22$	(11) $45 + 35$	(12) $26 + 64$
(13) $39 + 3$	(14) $45 + 7$	(15) $6 + 58$	(16) $5 + 68$
(17) $47 + 3$	(18) $81 + 9$	(19) $2 + 48$	(20) $6 + 74$

3. 18 players of National Cricket team of Sri Lanka came to play in Bangladesh. There are 18 players in Bangladesh team also. How many players are there in two teams altogether?

4. In a school there are 26 girls and 25 boys in class two. How many students are there in class two in total?

B. Count and write the numbers.



students from considering opportunities beyond their immediate environment.

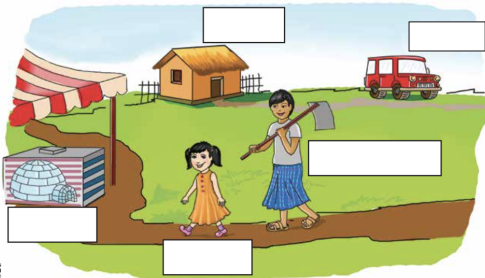
The French textbooks however, present their images and scenarios in a magical context, with witches and ghosts. This is an appealing aspect for children and eliminates biases of rural versus urban settings.

These pages from the Bangladeshi maths textbook utilise diverse learning methods, which would help enhance student learning. The Bangladeshi English textbook lacks this, and should adapt this method.

An interesting aspect of both textbooks is the context in which the content is set. In both mathematics and English textbooks, the scenarios and

A final point of concern in both the Bangladeshi textbooks is the absence of a dictionary. While the English textbook includes a vocabulary list, it lacks definitions, which could be highly beneficial for students' comprehension and language development. However, both the Nigerian and French textbooks lack a vocabulary page at all. On the other hand, the mathematics textbook lacks a vocabulary list altogether. The inclusion of a vocabulary page in children's textbooks, whether for maths or English, offers significant educational benefits and acts as a valuable tool for building a strong linguistic foundation²⁸, fostering comprehension, and nurturing independent learning skills in children.

C. Look and say. Write.



5 settings

are predominantly rural. While this choice aims to make the content relatable to the majority of students in Bangladesh, it may inadvertently limit their aspirations. This is also prevalent in the Nigerian textbooks, as the images and scenarios presented are based solely in rural contexts. Encouraging children to aspire to urban opportunities is equally important, and textbooks should reflect this diversity. By exclusively depicting rural settings, textbooks may unintentionally discourage

²⁸ "How can a vocabulary display impact children's vocabulary, especially in writing?" *Viridis Schools*

lesson	now	part	shed
look at	number	page	shoe
letter	nine		short
last	no	Q q	shoulder
life	not	quail	show
label		quilt	side
M m	O o	question	sky
man	old		sleep
mango	open	R r	small
mat	orange	rainbow	something
Monday	other	rat	square
money	ox	read	stand up
monkey	one	rectangle	story
morning	of	red	straight
mouth	on	rich	sun
me	open	rose	Sunday
many	our	round	supper
match		review	say
missing	P p	rhyme	six
my	pencil		seven
miss	plant	S s	she
model	play	sad	sound
moral	point	same	sentence
N n	pond	Saturday	size
name	poor	school	
nest	pot	seat	
net	put	see	
nice	picture	seed	
night	pair work	sell	
nose	partner	shape	

3. Solutions for Analysis

To address the issue of misrepresentation of children in Bangladesh based on their skin tone, it is essential to promote diversity and inclusion in educational materials, including government textbook²⁹. One effective way to achieve this is by incorporating characters with varying skin tones throughout these textbooks. This approach has several benefits:

Inclusivity³⁰: By featuring characters with diverse skin tones, textbooks can represent a more accurate reflection of the country's population. This inclusivity sends a powerful message that all children, regardless of their skin colour, are valued and belong.

Cultural Awareness³¹: It can help foster cultural awareness and understanding among students. By portraying characters from different backgrounds,

students can gain a better appreciation of the rich diversity within their own society.

Counter Stereotypes³²: Introducing diverse characters can challenge stereotypes and biases that may exist among students. It helps break down preconceived notions about the importance of skin tone and encourages empathy and acceptance.

Increased Self-Esteem³³: When children see characters who look like them in their textbooks, it can boost their self-esteem and confidence. They feel seen and heard, which can positively impact their overall learning experience.

Promote Tolerance: Exposure to diversity in educational materials can promote tolerance and respect for differences. It can contribute to a more inclusive and harmonious society.

Preparation for the Real World: In a globalised world, understanding and appreciating diversity is a crucial skill. Including characters with varying skin tones prepares students for interacting with people from different backgrounds in their future careers and personal lives.

Government Leadership: When government textbooks lead the way in promoting diversity, it sets an example for other educational institutions and publishers to follow. It demonstrates a commitment to creating a more inclusive and equitable educational system.

I suggest revisions to the characters portrayed in both the Bangladeshi textbooks to represent varying skin tones. Using the Canva platform, I have created an example of what this may look like:

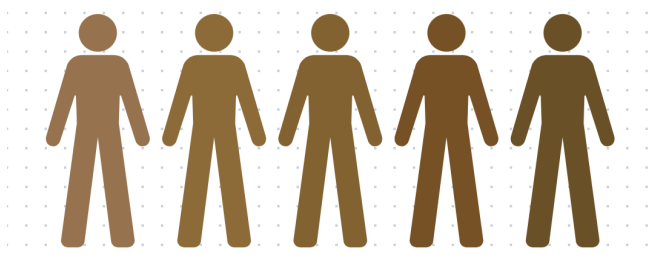
²⁹ Jodie Rodriguez, "Why It's Important for Kids to See Themselves in Books" *Scholastic*, (2018)

³⁰ Katie Leigh, "Inclusivity in Children's Literature: Examining Quality of Text, Accuracy of Representation of Children with Cancer in Picture Books, and Children's Response to Three Specific Texts" *University of Toronto*, (2019)

³¹ Jennifer Turner, "Beyond Cultural Awareness: Prospective Teachers' Visions of Culturally Responsive Literacy Teaching" *Action in Teacher Education*, Vol 29, 3. (2007)

³² Rebecca Bigler, "The Use of Multicultural Curricula and Materials to Counter Racism in Children" *Journal of Social Issues* (2002)

³³ Vanessa Penberg, "The Importance of Representation in Children's Literature" *BKReader*, (2017)



serves as a valuable tool for students to consolidate their understanding, engage in recall, and apply acquired knowledge through practice, fostering a more comprehensive and applicable comprehension of the subject matter.

Below, is an example for what this may look like for the maths textbook:

I would recommend revamping the exercises in a way that incorporates diverse learning methods, this approach will boost student engagement and enhance long-term retention. Recognizing the diversity in students' learning styles is key, with the understanding that the effectiveness of a method depends on factors like subject matter and specific learning objectives. Introducing a variety of exercises in the textbook will allow a more personalised learning experience, improving the likelihood of better recall and understanding. This adaptation ensures that students can connect with the material in ways that suit their individual preferences, fostering a more effective and inclusive learning environment. For example, I revised an exercise from the Bangladesh English textbook:

REVISION PAGE
Topic 1.1-1.4

1. NUMBER OF RED BLOCKS: _____

2. NUMBER OF BLUE BLOCKS: _____

3. Which colour block is greater and by how many? _____

4. Order these numbers from greater to smaller:
83, 44, 9, 56, 2, 77, 23, 12, 92, 30, 5, 33

5. Write the following numbers in words
23: _____
45: _____
8: _____
56: _____
88: _____
100: _____

6. List the first 8 even numbers: _____ List the first 8 odd numbers: _____

Pp	Qq	Rr	Ss	Tt
Pot	Quail	Rose	Sun	Tiger

Write sentences using these words:
Eg: The **tiger** sat in the **sun**

A good government textbook should provide definitions in both Bengali and English. This approach will simplify the learning process for students, making it more accessible and less challenging. The primary goal is to facilitate easier comprehension and foster a supportive learning environment.

In this rewritten exercise, I have changed the repetitive exercise ‘Look, Listen and Say’, and ‘Read and Say. Trace and Write’. Instead, I have included an exercise of writing sentences using the vocabulary learnt on that page.

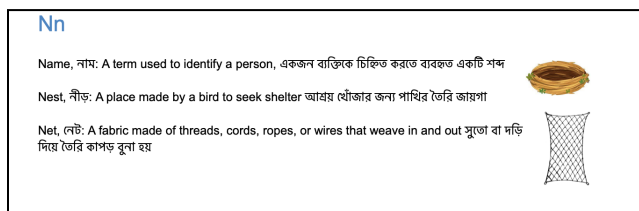
For example, instead of having:

N n

name
nest
net

In alignment with the Nigerian national curriculum, the inclusion of revision pages and exercises at periodic intervals within the chapters or topics covered would be beneficial also in Bangladesh textbooks. This approach

The definitions should look like this:



This dedicated page provides clear definitions and explanations for key terms, enhancing conceptual understanding and ensuring a solid foundation in the language associated with the subject matter. The vocabulary page serves as a handy reference during lessons, reinforcing memory and understanding by offering quick clarification for unfamiliar terms. Encouraging students to engage with this resource would foster independent learning and would allow students to study by themselves.

4. Conclusion

In conclusion, this research paper has shed light on the challenges faced by developing countries like Bangladesh in addressing educational disparities, emphasising the important role of high-quality national curriculum textbooks.

The comparative analysis with Nigeria and France has provided valuable insights into the strengths and weaknesses of the Bangladeshi textbooks. The examination of pedagogical approaches, representation of characters, and contextual settings has revealed areas for improvement and innovation.

The proposed solutions involve fostering diversity and inclusion in educational materials, revamping exercises to accommodate diverse learning methods, and incorporating periodic revision pages. These solutions aim to enhance student engagement, address misrepresentations, and promote a more comprehensive and inclusive learning environment.

Following this research, further studies may explore the applicability of these approaches to other developing countries facing similar challenges, such as India, Pakistan, Afghanistan, and other multi-ethnic, multi-lingual, semi-rural societies. Additionally, research could delve into the potential challenges of teachers adapting to new textbooks and the willingness

of countries to invest in producing updated educational materials. These aspects are crucial in ensuring the successful implementation of educational reforms and bridging the existing gaps in learning opportunities.

Ultimately, the success of these proposed challenges relies on collaborative efforts between policymakers, educators, and curriculum designers. By prioritising the creation of high-quality, inclusive, and effective national curriculum textbooks, developing countries can take significant strides towards fostering a more equitable and accessible education system for all.

Acknowledgements

I would like to extend my gratitude to Professor Aviezer Tucker for his mentorship in this research paper.