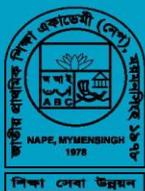# PRIMARY EDUCATION JOURNAL

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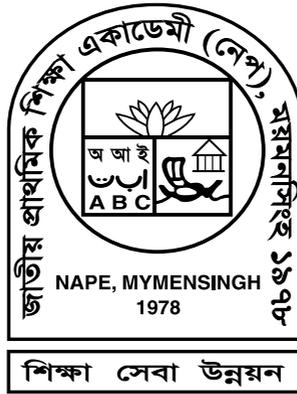
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Editorial

National Academy for Primary Education (NAPE) is going to publish the 10th issue of the Primary Education Journal which is its yearly publication. In Primary education sector, the Primary Education Journal is a professional scope for educationists, education at administrators, educational researchers and practitioners in related fields intending to share their research and intellectual work to improve the quality of education.

This issue of Primary Education Journal addresses a range of policy and practical research topics-such as punishment of students in primary schools' in Bangladesh, policy and reality of practicing Diploma in Primary Education in government primary schools in Bangladesh, use of digital content in english subject, deprivation in education due to child labor in Dhaka city and teachers' views regarding the new approaches of primary science textbooks in the context of rural and urban areas of Bangladesh.

This issue includes five articles. The 1st article investigates the punishment, engagement and learning in Bangladesh primary schools. The 2nd article tries to explore the policy and practice issues for implementing DPEd in government primary schools. The 3rd articles reveals that digital content greatly influences students' classroom learning in terms of making their lesson easier, interesting and effective. The 4th article discusses about the causes particularly how child laborers work and has its consequence hampers them to achieve education as their basic human right. The 5th article reveals that most of the teachers are knowledgeable about exploring prior knowledge, real-life orientation of science concepts, activity-based class, collaborative approach, illustrations & diagrams and summary of a lesson. But most of the teachers are not well-informed about the way of starting a lesson, science process skills and inquiry-based teaching-learning process.

I would like to express my gratitude to the members of the editorial advisory board for providing their expertise and doing the hard work needed for making the journal a standard one. I would also like to thank the members of the editorial board for their support and cooperation.

I would highly appreciate readers, 'comments on the present issue which will encourage us to enrich and improve the future publications related to primary education.

Md. Shah Alam
Chairman
Editorial Board

Panel of Experts

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Punishment, Engagement and Learning in Bangladesh Primary Schools: a Postcolonial Framing of Schooling Experiences

Md. Ahsan Habib [a], Md. Saiful Malak [b] and Joseph Agbenyega[c]

[a-b] *Associate Professor, Institute of Education and Research (IER), University of Dhaka*
[c] *Associate Professor, Monash University*

Corporal punishment has been considered a long culturally approved disciplinary measure in the schools of Bangladesh. Despite the ban, corporal punishment is prevalent in Bangladeshi primary schools. In an effort to better understand the roots of present widespread school punishment practices, the present study explores how students experience punishment at school and how punishments are rooted in the educational practices in Bangladesh. The study is a part of a bigger study. A total of 79 students from 13 schools participated in this study. Focus group and individual interview were employed to collect students' experiences of school punishment. And a postcolonial theoretical frame was employed to discuss students' experiences of punishment at school. The results show that students experienced punishment including corporal measures over class tasks and disciplinary issues. Experiencing corporal punishment not only negatively affects students' emotional bond with school but also influences student disengagement and absenteeism. Punishments were used in school as a means of controlling student power, voice and agency in school activities.

Key Words: *School engagement, Corporal punishment, Belongingness*

Introduction

Studies consistently showed that physical punishment on young children as a disciplinary measure had limited positive effectiveness and had short and long term deleterious effects (American Academy of Pediatrics, 1998; MacKenzie, Nicklas, Waldfogel, & Brooks-Gunn, 2012; Österman, Björkqvist, & Wahlbeck, 2014). Exposure to corporal punishment puts children at severe risk of mental health problems, physical injuries, and even death (Evans, Davies, & DiLillo, 2008; Lansford et al., 2014). Corporal punishment at school exposes children to harsh punitive environments and students perform significantly worse in areas of cognitive functioning (e.g. memory, reasoning, and problem solving) compared to their counterparts who had not been punished (Talwar, Carlson, & Lee, 2011).Along with physical, psychological and cognitive functioning, experiencing harsh and threatening disciplinary treatment push students to respond with more violent behaviour (Baker, 1998). Baker indicated that this process acts as "vicious cycle" where teachers alienate students through punishments and students, in turn, respond in ways that encourage their further alienation and particularly those who are at-risk, it promotes further alienation and distancing (p. 35).

Bangladesh High Court declared all types of corporal punishment in schools illegal and unconstitutional in 2011 (Hasan, 2014). Despite banning on corporal punishment, study(Mohiuddin, Khatun, & Al-Kamal, 2012) showed that punishment including physical measures are widely prevalent in Bangladesh. Mohiuddin et al. (2012, p. 40)found that corporal punishment had been used as a "long and unchallenged culturally approved disciplining measures" in Bangladeshi schools. The perception of school punishment as an efficacious technique for training and discipline reflects the attitude of many teachers and parents (Rahman, 2014).

Context

The present education system in Bangladesh began to evolve in the early 18th century when the British introduced a modern education system in the Indian subcontinent (Tapan, 2007). During this period, education gradually became a means of colonisation and subjugation of people in the subcontinent (Barua, 2007, p. 63). The British established an educational system of training clerks and workers required for administration and economic profit (Khatun, 1992). Indeed, British colonial education practices promoted a system of rote learning and mimicry of British culture. This colonial praxis in education has had a long-term effect on the natives, making them dependent and less self-reliant (Barua, 2007).The long-term colonial experience not only left a colonial attitude of looking to the West for solving problems, but also produced local elites with a similar colonial mentality, where one dominated the other in all aspects of social and civic life.

This educational experience of 200 years deeply influenced the educational system and practices even after independence. In 1947, British India was liberated from colonial domination with a separatist concept based on religion, as India for Hindus and Pakistan for Muslims. Pakistan was formed of two predominantly Muslim areas, designated East Pakistan and West Pakistan. East Pakistan (now Bangladesh), despite cultural and language differences, was attached to Pakistan, geographically 1,600 miles away. The West Pakistanis ruled the Bangladeshi people in similar colonial fashion, imposing West Pakistani language as the sole national language, patronising Pakistani cultural practices, and continuing economic deprivation. Bangladesh was finally liberated after 24 years in 1971 after a nine-month long bloody war. During this period, educational policy was based on Islamic ideology, ignoring local cultural diversity (Khatun, 1992).

After liberation as a war-torn country, the government of Bangladesh nationalised primary schools in Bangladesh under the *Primary Schools Act of 1974*. This Act abolished the role of local governmental bodies and involvement of communities in school management (Zia-Us-Sabur & Ahmed, 2010). This centralised management curbed the involvement of the community and locked the school system into a bureaucratic hierarchy, where nobody took responsibility for large-scale non-enrolment, non-attendance, and dropout rates (Ahmed, Ahmed, Khan, & Ahmed, 2007).

Further, many private schools developed for the growing middle class, and English medium schools were created for the rich. After 32 years of independence, Bangladesh today has more than 13 types of primary schools catering to a number of different population groups (Directorate of Primary Education, 2013). Most lower class children and village children attend government primary school. Urban non-government schools serve working class children. Middle class children attend private kindergartens, and wealthy children attend private English schools. These schools not only vary in respect of tuition fees, but they also follow different curricula and school practices in terms of philosophical and cultural values. For instance, Ebtedayee or Quami Madrasa provide religion-based

primary education, while many English medium schools follow the curriculum of the Cambridge International Examinations (Haque & Akter, 2013; Sommers, 2013).

The present study investigated the following research objectives:

1. To explore how students experience punishment at school
2. To identify how punishments are rooted in the educational practices of Bangladesh

Methodology
Participants

This data rose as part of larger doctoral study conducted in Bangladesh. The study used both individual and focus group interviews as data collection tools. The participants were grade five primary school students from government primary schools situated in both rural and urban settings in Bangladesh. A total number of 13 focus group interviews involving 79 students from 13 schools participated in the study. Along with the focus group, nine additional individual interviews were conducted with irregular student/non-attending students (registered for grade five) in the participating schools.

Maximum variation sampling (Sandelowski, 1995,p. 181) was employed to select participants from three different socio-economic and ethnic regions in Bangladesh including Rangamati, Kurigram and Narayangonj.

Instruments

The research instruments of this study comprised a semi-structured interview protocol and a guideline for focus group interview. As mentioned earlier 13 focus group interviews involving 79 students from 13 schools and 9 individual interviews were conducted using the semi-structured interview protocol and focus group guideline respectively. The items of both interview protocol and focus group guideline included understanding how students experienced a sense of belonging to their schools. However, a number of probing questions were asked regarding school punishment.

Procedure

All data were collected on the school premises before and after the school break or during the mid-meal break. Participants were first invited to participate in focus group interviews. Individual interviews followed. General purpose research topics were explained to fifth grade classes and students were subsequently invited to participate. Each focus group commenced with a short group activity whereby students were invited to develop a school map on a big poster. This group activity served as an icebreaker for participants and helped students to focus. The duration of the average group meeting was approximately 60 to 90 minutes, with up to 10 to 15 minutes being used for informal socialising (Schensul, 1999). All focus group interviews were audio-recorded with the consent of participants and their parents.

Data analysis technique

Thematic analysis technique of Moustak as (1994) was used for both individual interview and focus group interview data. For the purpose of reliability of the qualitative data, triangulation and peer-review (inter-rater reliability) techniques were followed throughout the data analysis process.

Results
The results show punishments were pervasively used in all the participating schools. Students' narration reveals three main features of experiencing punishments at school 1) types of punishments, 2) causes of punishments and 3) how it associated with students' school outcomes.

1. Types of school punishments
Students indicated two different types of punishments including corporal and verbal in their schooling experiences. The findings of the study showed that corporal punishment existed in most of the schools and constituted a major fear factor in how they experienced school. In some cases it generated physical injury, even with female students. Gouri, a female student from a rural school, stated *"Sir [teacher] took me and beat me up. My hand got swollen"... I feel very sad" (F$_{13}$HRL)*. Many students identified corporal punishment as the worst experience they confronted at school. For many students the worst memory at school was the day they were beaten severely. Ruku happened to identify the worst day at school.

> *Interviewer: Can you tell me about a day [when] you felt worst in the school?*
> *Ruku: Yesterday.*
> *Interviewer: What happened yesterday?*
> *Ruku: Teacher beat us up with a cane. [He] beat us all. (F$_{13}$HRL)*

It seems that corporal punishment not only hurt physically but generated a feeling of shame. One participant described a beating experience meted out to him.

> *Salam: [teacher beat us] with a scale [usually a wooden or plastic measuring stick].*
> *Interviewer: How do you feel?*
> *Salam: It is shameful to be beaten. (F$_{11}$LUL)*

Harsh verbal discipline, like physical punishment, appeared equally in the narratives in students' unfavourable schooling experiences. Students spoke of the teacher shouting at them, using derogatory words, or calling them by something other than their names in front of class.

> *If somebody can't solve the math problem, [teacher] scold us a lot at [the] time, so I feel annoyed. (F$_7$HUG)*
> *I feel disgusted when teachers criticise [us] harshly and are very wordy, just for one fault. (F$_7$HUG)*

2. Causes of punishments
Students indicated that punishment mostly occurred when students fail to perform class task. According to the students, teachers usually give a chunk of text (poetry, essay or letters (grammar class) to students to memorise at home. Students are asked to recite from the memory from the given task in the next class. Students who felt overwhelmed by this task often tended to skip school:

> *"When I am not able to prepare the homework [and] teacher beats me" (I$_{nd}$LUH).*
> *Sometimes I skipped the school when there were large volumes of homework to memorise, like difficult English sentences. If I cannot memorise it, I do not come to school" (I$_{nd}$HUL).*

Other than this inability to prepare the class task, students who misbehave by quarrelling or fighting with other classmates at school receive physical and verbal punishment.

> *There is [sic] more fighting in our class; he [a student] beats everybody, including girls, [and] Didimoni [Madam] beats him. (F$_1$HUH)*

3. Punishment and student outcomes

Whatever the reasons for punishment, students' narratives demonstrate that punishment, both corporal and verbal, negatively impacted students' interest in attending school, leading to skipping classes and being disengaged from class activities.

> *When teachers beat us, scold us, I don't like to come to school. (F_1-HUH)*
> *When teachers do not beat us, I feel [I want] to study more. (F_8-HRG)*

The fear of being beaten featured prominently in responses. It seems from the data that students perceived that if they fail in a class task, they will be beaten. The fear (or sometimes threat of punishment), prompts them to decide whether they will go to school or not. A girl from an urban school said she did not like to come to school*, "When [teacher] threatens us [by] saying "[I] will beat you when you come tomorrow". (F_1-HUH)*

Students' narratives revealed that those who were not regular and had poor score in the school examination were at more risk of getting punished (*If there are students' names from number one or number two, nothing…happens to them, but…the rest are given punishment*). While students with irregular attendance remained silent regarding punishment issues, their regular classmates stated that some children did not attend school for fear of corporal punishment.

> *Anu: They [students who attend irregularly] fight on [sic] something and get beaten by the teachers. This is why they say they do not like to come to school.*
> *Silu: Sir, teachers beat them a little if they do something naughty.*
> *Puspo: Teachers scold them, first a little then… [beat them]. (F_{10}HUL)*

Sometimes students leave the class before it ends or after tiffin period for fear of being punished.

> *Dina: Sir, they [students who attend irregularly] do don't feel well, [they complain] that some do not talk to them, teachers behave badly with them, and for this they leave the school. (F_5LUG)*

Findings highlighted that teachers' verbal aggression-such as yelling, name-calling or using insults – produced annoyance, disgust, and negative attitudes among students toward the teacher, the class and self:

> *I do not like the class when the teacher calls us 'rotten'"; "When teacher scolds us a lot at a time, I feel annoyed.*
> *When I cannot do my lesson…, when teachers scold me, I do not like to stay at school. (F_1-HUH)*

Though limited in number, participants showed explicit and strong emotion regarding received unfair or unjust punishment or accusation by the teachers. Teachers often rebuked students regardless of their involvement in a negative situation, which would offend and frustrate those students who were not responsible:

> *If somebody cannot solve a mathematics problem, he [the teacher] scolds us all a lot…I feel disgusted*

Similarly, when teachers do not listen to students carefully and do not provide them with an opportunity to explain what happened, the innocent student may be unjustly punished. For the student, this unfair experience and treatment may have a distressing and long-term effect on him

> *[The] teacher can tell me if I have done [wrong], I can understand, I would feel better. Teachers do not listen to us properly and our complaints carefully. [I] do not like getting punishment without doing any wrong.*

Further, findings from this research suggest that students perceived that teachers behaved differently with high and low-achieving students. Students perceived that high-achieving students receive less punishment:

> *If there are students' names from [group] number one or number two, nothing…happen[s] to them, but…the rest are given punishment.*

Interestingly, while students considered punishment as an unhappy schooling experience, some considered punishment as inevitable in teaching and student discipline.

> Dipok: *[teacher] do not beat us, only scold us. It is OK to scold us if we do bad things. (F$_6$LUG)*
> Hena: *If (students) misbehave, [teachers] need to beat the students. (F$_{12}$LRL)*

Even some students with irregular attendance showed similar positive attitude toward corporal punishment. When asked if they felt bad about being beaten by their teachers, Mira denied this and justified that "*teacher has beaten [us] to teach discipline*" (I$_{nd}$HRL).

Discussion
The purpose of this paper was to explore how students perceived and experienced punishments at school and take a theoretical stance to analyse this long practice phenomena from historical and cultural context.

The findings indicate that despite ban, corporal punishment is practised pervasively across schools. Punishment, both physical (i.e. beating) and verbal (i.e. name-calling and yelling at students) forms were used by teachers as a means of getting student to rote memorise text, to get home task done and to discipline students at school. The study shows that punishment influences students' attitude and behaviour toward school and generates a feeling of abhorrence towards school. Students' perceptions indicate that punishment not only physically hurts, but also reduces their feelings of dignity at school.

Framing punishment through postcolonial discourse/lens
Postcolonial discursive theses examine the impact and continuing legacy of colonial orientation on colonised land, people, and culture (McLeod, 2010). Viewed from this perspective, we employed the postcolonial discursive lenses of identity, agency, and power, as these issues are closely related to the student's schooling experiences. Since school practices are largely constructed through social interaction and experience, it is contextually, historically, and culturally specific. Therefore, in primary schools, children's identity, agency, and power must be looked upon from within the context in which the educational practice is taking place (Agbenyega & Deku, 2011). This internal critique and analysis is important for understanding internal issues and to give children a foundation to understand their schooling experiences.

Punishment as deterrent to student identity
Evidence from this study suggests how textbook-based pedagogical practice, overemphasis on examinations, and teacher-centred instructional practices present teachers as the sole authority on knowledge, challenging students' identities in school. Colonial education practices impose the coloniser's knowledge and learning on colonised people, undermining indigenous knowledge and taking away native identity and voice. In the post-colonial era, colonial educational practices, power-relation, domination, and control are exercised through pedagogical techniques. This is where the teacher, as coloniser, rules the students, as colonised (Agbenyega, 2008).

First, evidence from the data in this study suggests that a prescribed textbook-based classroom teaching–learning approach directed students to only memorise portions of the textbook, marked by teachers, or what teachers have formulated. This textbook-based learning and rote memorisation leaves little room for students to contribute and connect with their experiential knowledge. This way of learning mirrors what Lord Curzon identified that rote memorisation is the great fault of the Asian subcontinent education system and that "knowledge is cultivated by the memory instead of the mind, and that aids to the memory are mistaken for implements of the mind" (Curzon cited in Seth, 2007). Seth (2007) reiterated that in the colonial period, natives perceived imposed western education as a means of gaining material success (e.g. jobs), and did not see it as a key to the fulfilment of nonmaterial desires and goals. By suppressing students' ideas or excluding their contribution to what is going on in their classrooms, education failed to connect with and appreciate individual student's creativity, native knowledge, emotions, and values in the educational system. Thus, students had no real understanding of and appreciation for the value of acquiring education in instrumental terms (Seth, 2007).

The findings of this study indicated that education practice did not change much over a century, and students continue to be 'copy machines' and do not have a sense of ownership over their knowledge. It appears from the findings of the present study that although schools offer education in students' mother tongue, pedagogical practice has little space for discussion, participation, and the connection of students' experiential knowledge with the classroom learning process. This practice, as Adjei(2010) refers to it, involves the amputation of learners' cultural knowledge and experiences in learning. The implication for school and classroom practice is that these pedagogical practices have to be decolonised through recognising and reconnecting with locally produced knowledge, sourced from cultural history, students' local surroundings, and everyday lived experiences and interactions (Dei, 2014; Dei & Opini, 2007).

Second, results from this study also suggest that students have to take regular examinations and class assessments, which mostly assess students' rote learning and lead students to further categorisation and exclusion at school. Examples of this include such things as students who comply with rote learning practice being identified as "good students" and those who did not as "bad students." In effect, a "good student" gets rewarded by being given class responsibilities and exempted from punishment. Categorising practices like this and others (e.g. open announcement of examination results) based on academic achievement made low-achieving students labelled and alienated. Students' with low examination scores were ignored and suppressed by the teacher.

Further, identity in the school social environment is pejorative and students are perceived as receivers of packaged knowledge and the teachers as knowledge givers. This relationship, together with pervasive rote memorisation practices in schools, leaves little

scope to co-construct knowledge. In this way, the teacher remains the sole authority of knowledge, and students are subjected to memorising and listening to what the teachers and textbooks say. This situation has also been documented elsewhere. For example, using a Ghanaian case study, Sefa Dei and Opini (2007) showed how, through power dominance, the colonial practice of creating hierarchy is maintained in schooling practice by constructing dominant images as the norm for students. In this study, it appears that having high scores in examinations is the sole criteria in being a successful student, and the rest are marginalised. Sefa Dei and Opini (2007) identified that schools need to provide students with "experiential understanding and appreciation of otherness" (p. 485).

Punishment as means of suppressed student agency

The postcolonial construct of *agency* within the colonial discursive framework, discussed earlier in the literature review chapter, refers to the ability of subjects to hold onto power or act to resist domination or to determine their situation (Ashcroft, Griffiths, & Tiffin, 2013). The findings of this study suggest that students were not allowed to have any say on their own educational practice and, rather, were suppressed if they protested any malpractice. Evidence from the present study suggests that, as discussed earlier, overemphasis on rote learning and teacher-centred pedagogical practice left little scope for the students to express their views or to participate in discussion. It appears that schools are designed to devote no space, time, and/or pedagogy to students' initiatives or participation, as it is not considered valuable.

Bernasconi (2004) noticed a significant finding extracted from Fanon's work: that injustice arises from lack of agency. In the present study, one of the few but strongly exposed experiences of a feeling of perceived unfairness often resulted from suppressing student voice. Evidence from the findings of this study has shown that teachers' passing of judgement, without giving students a chance to defend themselves, leads to students being punished or accused mistakenly or provides a feeling of injustice.

Lack of agency in school practice has not only undermined the student–teacher relationship but has also generated a negative attitude towards school. From the postcolonial perspective, a teacher who values students cannot ignore them or fail to recognise them without apparent reason.

Punishment as control of power

Colonial pedagogy is symbolic of brutality towards students. It is where teachers consider themselves as the most powerful -the boss or master- and treat children how they like. The power dynamic refers to the way in which the teacher uses power over children. For example, in evidence from the present study, the teacher terrorises the students with corporal punishment and defiling words or screaming at them. The results of the present study repeatedly showed how teachers employ the constructed identity of authority over knowledge, and the provision of punishment was reserved as an absolute power over students in school practice. On the other hand, suppressing students' voice, identity, and agency further undermines students' power in student–teacher relationships and, in some cases, lead student being submissive in response to wrong institutional practice ("If students do misbehaviours, [the] teacher needs to beat [them]").

The findings of the study show that the teaching practices of schools were hegemonic, that is, children were silenced by teacher authority. Agbenyega (2009) described it as mirroring colonisation in a new formation. Although colonial masters exited long ago, the mindset remains in the classroom, in which teachers do not allow children to talk or move about

freely. Teachers control children's knowledge and activities, and 'push' them to complete the tasks demanded of them. This imposing relationship of teacher over children in schools can be explained as "simply a novice receiving knowledge from a higher authority" (Agbenyega & Deku, 2011, p. 16). By and large, applying postcolonial theory enabled the uncovering of a seemingly contested educational space where individuals within that space struggle for power and recognition.

Teachers handing down prescribed curriculum materials, whereby the students have no opportunity to contribute to their development, significantly affects the students' autonomy over their academic performance (Ryan & Deci, 2000). From a postcolonial perspective, excluding students from the learning process can be likened to ascribing excessive power and a dominant position to teachers. The oppressive power relationships in the educational system in Bangladesh replicate a master-servant relationship(Agbenyega, 2006). This is an example of colonisation where the freedom of choice to set up classrooms and select teaching content or materials has no place. Instead, students follow rules and instructions from teachers. In this way, the students consider themselves to be subservient to teachers.

The use of postcolonial theory has extended the understanding of how punishment practice at school starts and progresses from the physical to nonphysical: the inner self to the outer context. Framed from within a postcolonial perspective, this study opens a space to discursively investigate how the school relationship and educational practices structure students' experiences of schooling. By exploring power, identity, and agency in relationships and educational practices through such theorisation, one can confront the existing mindset and establish a case for transforming school practices by disengaging colonial practices and embracing a fresh consciousness.

Conclusion
We have attempted to deconstruct the context-sensitive nature of student schooling experiences and educational exercises that emerged as issues related to school punishment. In doing so, we used a postcolonial backdrop to bring together cultural and historical discourse that shaped both social and educational school practices. From the overall discussion, it can be concluded that in Bangladesh, the power relationships and oppressive educational practices influence students' connection with school, situated in a colonial epistemology. However, colonial epistemology does not solely refer to foreign or alien powers but to any imposition or domination (Dei & Asgharzadeh, 2001). In this respect, the educational context, pedagogy, assessment, regulations, and curriculum of primary education are rooted in colonial perspectives, in which students' identity, agency, and power are submerged in schools' coercive authority. Thus, a postcolonial discursive perspective provides consciousness to challenge actions, shake old practices and give birth to new attitudes (Agbenyega & Klibthong, 2011). This refreshing awareness can help reconstruct educational practice so that students have the identity, agency, and ownership to belong to school.

Employing postcolonial theory attempted to shed light on students' experiences of punishment at school from cultural, historical and socio-political point of view. The study employed postcolonial constructs of identity, agency and power to analyse students' punishment experiences at school. The use of postcolonial theory facilitated the discovery of how the deployment of unequal power dynamics through the use of corporal punishment subjected Bangladeshi students to authoritative compliance under their teachers. It demonstrates how teachers' practice suggests they own the students and can do whatever they like to them. In addition, the use of postcolonial theory uncovered how students'

voices are suppressed in the daily teaching and learning process, mirroring an educational system built on ownership and control, inherited from a colonial legacy.

Way forward

The research findings have implications for a primary school environment that affects children's emotions via its discipline measures. Pervasive use of corporal and verbal punishment makes it difficult to have enjoyable experiences at school. An isolated intervention initiative in primary school in Bangladesh showed that teachers' use of alternative methods of classroom management brought significant change in students' attendance and academic achievement (Mohiuddin et al., 2012). This suggests it would be beneficial for schools to share their good practices of class and disciplinary management in cluster training sessions (teachers in Bangladesh have school-based training once every two months in which teachers from neighbouring schools gather). Central administration can provide teachers with booklets, CDs, DVDs or stories of alternative behaviour and school management strategies from other countries. Similarly, reflective practices and school university collaboration (Deppeler, 2012) could provide teachers with home grown and international sources of good practice and evidence-informed pedagogical innovations to enhance student learning. Reflective training about how students might feel when exposed to debasing language and situations in the classroom, for example, could be arranged. Students' documented lived experiences can be shared with teachers to facilitate understanding of how teachers' behaviour may impact students' emotional and mental processes.

Limitations of the research

Interview transcripts revealed that students expressed more negative and uncomfortable experiences as the conversation progressed. For example, while students initially talked only about positive (ideal) aspects of school and denied receiving any punishment, as the interviews progressed, they spoke about physical punishment, bullying and teacher absenteeism. A more extensive amount of time and greater engagement with the students might shed more light on how and what influences students' sense of belonging to school.

Future direction

Policy contribution in Bangladesh has a highly centralised education system, and policies are top-down, leaving little room for end stakeholders to weigh in. The present study is one of the few that used students as the sole contributors to speak about their schooling experiences. Thus, the study could give fresh insight into how government primary school students feel and think about their schools (e.g. how corporal punishment is pervasive in government primary schools even though it has been banned for several years).

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Practicing Diploma in Primary Education at Government Primary Schools: Policy and Reality

Rabeya Khatun[a] and Muhammad Salahuddin[b]
[a] *Instructor, Primary Teachers' Training Institute (PTI), Mymensingh*
[b] *Assistant Specialist, National Academy for Primary Education (NAPE), Mymensingh*

The Diploma in Primary Education (DPEd) is one of the significant advances of TED plan in Bangladesh. For ensuring quality primary education we need quality teachers whereas DPEd helps a lot. The main objective of this study is to explore the policy and practice issues for implementing DPEd at government primary schools. This study has followed qualitative research design as fundamental. Although it has been guided by empirical research method to collect and analyze the data, those data have been collected from both primary and secondary sources to meet the research questions. Using qualitative analysis method, it is found that DPEd has strong policy direction while the trainee teachers are facing different obstacles like as heavy academic works, extensive non-academic work, physical/mental sickness, non-cooperation of head teachers, assistant teachers and family members, reluctantance of trainees, improper instructions, insolence of officials, imbalance of time and workload. This study recommended reduction of workload at fourth term and ensuring strong collaboration with PTIs and schools, close monitoring, mentoring and supervision for trainee teachers.

Key words: *DPEd, Teacher Education, Bangladesh*

Introduction

In recent era, the world moved to achieve quality education as committed to sustainable development goal. The global educational trend in the last decade was to achieve 100% enrolment rate including reducing dropout and repetition at primary level. As a part of global movement, Bangladesh showed the highest success in primary education sector to achieve millennium development goal (MDG). A compendium of the scenario was found in Bangladesh Education Statistics Report 2017. The net enrolment rate was 94.7% in 2005 while it was 97.9% in 2015. In addition, the dropout rate was also reduced dramatically from 47.2% to 20.4% from 2005 to 2015. The trend of reduction rate subsided from 10.2% to 6.2% in the previously mentioned decade (BANBEIS, 2018). The quantity-based achievement guided us to ensure quality education as we decided in SDG4.

It is arduous to ensure quality education without quality teacher. That is why the EFA Global Monitoring Report for 2013/4 "Teaching and Learning: Achieving Quality for All" suggests that it is necessary to attract, motivate and retain the best qualified candidates in teaching, to provide good quality initial and ongoing teacher education and support (UNESCO, 2014). Similarly, the teacher education gets priority for ensuring quality education in sustainable development goal documents. The target 4.c stated that "by 2030,

substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and Small Island developing States" (UNESCO, 2018, p.40). In addition, they identified few global and thematic indicators to achieve SDG4 through implementing target 4.c.

Before signing the SDG and at the end of MDG in 2011, Bangladesh took a national plan and strategy for primary education Teacher Education and Development (TED Plan). The aim of the plan was to give an overarching framework for teacher development. In addition, this plan also aimed to improve primary education through a "holistic, life-long process of CPD" based on teacher competencies and covering initial appointment to later stages of the profession and to harmonise a considerable number of training activities for teachers (Breakell, Nishad, & Das, 2016).

The Diploma in Primary Education (DPEd) is one of the significant advances of TED plan. In 2011, the Ministry of Primary and Mass Education (MoPME) decided to start DPEd for primary school teachers against Certificate in Education (C-in-Ed) course. MoPME instructed the National Academy for Primary (NAPE) to develop curriculum and course materials for this course which was piloted in 2012 at 7 Primary Teachers' Training Institutes (PTI). After that in 2013, this course was introduced at 29 PTIs and in 2015 at 36 PTIs and 2019 in all 67 PTIs (Hossain, et al., 2015).

The DPEd course is six months longer than the C-in-Ed. The program is structured in a way that it actively combines student teachers' practical experiences in school with the learning on taught courses at the Primary Training Institutes (PTIs). By promoting learner-centered teaching and learning methods the DPEd program aims to supportlong term change in classroom practice (Breakell, Nishad, & Das, 2016).

Rational and Scope
The philosophical foundation of DPEd was developed basing on constructivism theory of John Dewey, Jean Piaget, Lev Semionovich Vygotsky and Jerome Bruner (Hossain, et al., 2015). This philosophical basis has given priority both to course work (47.5 credit hours) and school level practice (48.5 credit hours) to ensure the quality of DPEd. This course has given emphasise to classroom practice along with course work which had taken place at PTIs (Hossain, et al., 2015). According to Breakell, Nishad, & Das (2016), this diploma program has introduced trainees, and teachers in the training schools, to the principles of differentiated learning. It makes the teacher accountable for the pupils' learning. Another potential real strength of the Diploma program is the placements. Time allocation reflects the equal status of PTI-based and school-based practices.

The trainee teachers of DPEd have caught opportunity to practice at placement school during course work and own school at the end of 12 month course work. On the one hand, students work take place throughout the first year in one of the 20 training schools under regular supervision of instructors of PTIs, on the other hand, this course is designed to represent an extended opportunity for students to link their learning to the classroom. It is clearly evident that the DPEd is operating as an in-service program that the internship takes place within the teachers' own schools. It is an opportunity for the teachers to apply their learning within a very real and immediate context, supported by skilled and experienced mentors and instructors. During this period (6 months), the Head teacher takes the responsibility for facilitating the trainee teachers and maintaining regular communication with the PTI. In this period, PTI Instructors visit trainees in the local URC periodically

where the trainees bring their portfolio along with lesson plans, school attendance book to the meetings. The instructors assess the trainees and showing possible ways to support them for being a good teacher.

One of the main objectives of this program is to ensure effective practice at school which students learnt from this course. That is why we need to know the gap between policy and practice for implementing DPEd at government primary schools. This study will help the policy makers, NAPE personnel, PTI administrators and instructors to implement DPEd effectively.

The main objective of this study is to explore the policies and practice issues for implementing the Diploma in Primary Education (DPEd) at government primary schools in Bangladesh. The research questions of this study are:
1. What are the policy guidelines to implement DPEd at government primary schools?
2. How do the trainee teachers follow the existing policies for effective practice of DPEd at government primary schools?
   a. What type of challenges are faced by the trainee teachers to practice learned knowledge of DPEd at own schools?
   b. How do the trainee teachers overcome these challengesto implement DPEd effectively at government primary schools?

Methodology
This study has followed qualitative research design as its principle. Although it has been guided by empirical research method to collect and analyse the data, those data have been collected from both primary and secondary sources to meet the research questions. The primary data have been collected from DPEd trainee teachers and instructors of PTIs. Moreover, the secondary data have been collected from different policies including the Curriculum of DPEd, Management Handbook of PTI, Assessment Guideline and students' guideline of DPEd, and Training school guideline of DPEd. Furthermore, different kinds of official documents, letters and office orders are also reviewed to meet the research questions.

This study has been conducted with a small number of samples due to its nature and its' findings have not been generalized for getting overall idea of effective implementation of DPEd. Using purposive sampling method, the researchers have been selected PTIs, trainees and instructors from different geographic locations. Firstly, a total number of 9 trainee teachers have selected purposively form three PTIs named Mymensingh PTI, Panchagar PTI and Bhola PTI (three from each PTI). Secondly, a total number of three instructors have been selected form PTIs (one from each PTI). Thirdly, a total number of nine classrooms have been observed to know the actual practice of DPEd of selected trainee teachers.

Three types of instruments have been used to collect primary data from field level. An open-ended interview schedule has been used for trainee teachers to get concrete idea about the practice of DPEd at government primary schools. Another semi-structured interview schedule has been used for PTI instructors to collect information about DPEd practice at schools. Furthermore, a classroom observation checklist was also used to examine the DPEd learning of trainee teachers which they practiced at own school classrooms. Using qualitative analysis method, the researchers have analysed field level data thematically.

Results
To meet the research questions, firstly we present the policy issues for implementing DPEd than the practice related findings have presented in different aspects.

Policy analysis
The different policies indicated implement action of DPEd at government primary schools through trainee teachers. In the curriculum of DPEd, management handbook of PTI, assessment guideline and students' guideline of DPEd, and training school guideline of DPEd identified different issues to implement DPEd at government primary schools after one year course work at PTIs.

In different policies, it is evidently mentioned that the duration of DPEd is divided into four terms in which in the first three terms (36 weeks) the trainee teachers participated in PTI actives. During the PTI period, the trainee teachers attended in teaching learning activities directly for 20 weeks and another 16 weeks they practiced at training schools to get first hand experience. After completing the first three terms, the trainee teachers were sent up for final exam at PTIs and then they would go to their own schools for final (fourth) term.

The curriculum of DPEd emphasizes professional practice at training schools and own schools for 32 weeks. To ensure this practice effectively, the DPEd identified the main objectives as "to develop different qualities of primary school teachers through professional knowledge and understanding, professional practice and values" (Hossain, et al., 2015; p.17). In addition, for effective professional practice another nine objectives are:
- to develop student-centered study schedules by using different methods and techniques according to the needs of all learners, demonstrating the ability to teach and manage the work.
- to express high expectations of all the children and show it at the workplace.
- to be able to communicating with all stakeholders including parents, students, and colleagues.
- to achieve the strategy of learning in a way that children can easily understand all the issues.
- to achieve the development of student learning through the classified management and work management capabilities of different types of learning.
- to encourage the students to ask question by the students and ensure proper pedagogy for asking questions.
- to display the ability for creating a safe, creative, stimulating and integrated learning environment.
- to be able to the use of information and communication technologies, including to select, create and use relevant and effective learning materials.
- to assist the trainee teachers for ensuring child-centered education and for promoting inclusive education through different effective monitoring.

There are different policy directions found in the curriculum of DPEd, management handbook of PTI, assessment guideline and students' guideline of DPEd, and training school guideline of DPEd regarding training school practice and own school practice.

a. Policy Direction for Training school Practice:
During 16 weeks at training schools, the trainee teachers take regular classes under the straight supervision of instructors of PTIs. The trainee teachers had followed school routine, general schools' rules and regulation not only to take classes but also s/he to prepare lesson plan and supplement teaching materials. In addition, every trainee has to

write reflective journal and log book regarding their everyday teaching practice at trainee schools.

For developing lesson plan of different subjects, trainee teachers have followed multiple instructions form the instructors which also varied from PTI to PTI. The policies of DPEd guided the teachers to develop lesson plan for every classes of regular routine. In addition, trainee teachers also are instructed to conduct class by using teaching related materials which are closely connected with their lesson. After completing all the duties at schools, the trainee teachers have to write reflective journal and logbook.

Specifically, trainee teachers have to write their opinion regarding teaching and learning process in the classroom, teaching experiences, different types of challenges and problem solving methods in the reflective journal. This reflective journal helps the trainee teachers to ensure active learning process, mapping the development of students, development of writing skills of students, opportunity of students to express their opinion and to ensure the creativity of students and self-criticism (Hossain, et al., 2015).

Furthermore, the trainee teachers prepare their everyday logbook based on the daily routine of schools and collect signature form the head teacher. After completing two/three weeks practice teaching at school, the instructors of PTIs have assess these logbook and put his/her signature (Hossain, et al., 2015). In addition, trainee teachers have to conduct action research, lesson study and case study at the trainee schools with the proper guideline of instructors.

b. Policy Direction for Own school Practice:
After completing first three terms at PTI, the trainee teachers have to go to their own schools for the next 16 weeks for practicing hands on learning. During that time, the teachers are recognized as trainee teachers and conduct classes regularly as distributed in school routine. Every day s/he has conducted four classes with proper preparation while in Thursday s/he has no classes. According to Hossain, et al., (2015), the trainee teachers have to prepare logbook by writing regular activities at schools, conduct baseline survey, prepare lesson plan based on students' learning need, conduct classes regularly (4 classes in a day and Tuesday off), write reflective journal regularly, preserve all documents in portfolio, prepare report based on regular work (one in every two months) and visit URC for meeting with the guide instructors (once in every two months).

In this period, the head teachers of government primary schools, Instructors of PTIs, Assistant Upazila Education Officers (AUEO), Instructors of Upazial Resource Centers (URC), Assistant Instructors of URCs, Superintendents of PTIs, District Primary Education Officers (DPEO), Divisional Directors (DD) and Directorate of Primary Education (DPE) have different roles to implement DPEd at government primary schools.

Specifically, the head teachers are fully liable to oversee the trainee teachers' activities at own schools and s/he will mentor and monitor their activities. In addition, the instructors have to meet with the trainee teachers at URCs once in twice months and give feedback to achieve teacher standards of this course. Moreover, the DPE, DDs, superintendents and DPEOs are also liable to ensure effective practice of DPEd through different instructions and orders. Furthermore, the head teachers have to prepare a total number of six (once a month) reports on the progress and activities of trainee teachers and s/he have to submit these reports to the superintendent of PTIs. Similarly, the instructors and AUEOs are also prepare a report on each trainee teacher when they observe their classes and meet at URCs.

Practicing DPEd at schools

During DPEd course, the trainee teachers have opportunity to practice their learning at real classroom setting in training schools and own schools. Researchers observed the own schools classroom practice of sampled trainees in the first half of 2018. It is found that all trainees in all areas had conducted lesson following lesson plan while 77.8% (7 out of 9) trainees used teaching materials to deliver their lesson. Although the researchers asked trainees to show previous lesson plan, 66.7% (6 out of 9) trainees mentioned that they did not have all lesson plans according to their class routine. In addition, 44.4% (4 out of 9) trainees had written their reflective journal and logbook regularly.

All of the trainees tried to follow lesson plan for conducting their lesson. Data shows that 66.7% (6 out of 9) trainees were starting their lesson with song and 33.3% (3 out of 9) trainees were starting with pictures while 44.4% activities were closely aligned with the topics. In addition, the presentation skill all of trainees were moderate whereas near about all 88.9% (8 out of 9) trainees used local language to deliver the lesson. All of the trainees had given pair work or group work during lesson while no one assessed the students' activities.

The trainee teachers were assessing the students during class with given emphasise on formative assessment while feedback was not popular like formative assessment. Data show that 66.7% (6 out of 9) trainees assess the students by using formative assessment tools while only 33.3% (3 out of 9) trainees were giving feedback after classroom assessment. In some cases (22.2%) teachers also gave negative feedback on the students.

The overall classroom practice was not satisfactory. Researchers inform to trainees before they went to their schools and requested them to conduct a class as per DPEd philosophy. That is why it is not the real situation although it would be a good practice if trainees follow their lesson plan. After observing the class, the researchers wanted to know if the trainees "conducted classes regularly following DPEd learning with lesson plan and teaching aids?" Following to this question, 66.7% (6 out of 9) trainees mentioned that it was not possible for them to conduct four or more classes as per DPEd guideline. Finally, all trainees recommended ensuring effective practice of DPEd through reducing the number of classes and workload at fourth term.

Challenges of Practicing DPEd

There are different types of challenges faced by the trainee teachers in own schools at the fourth term of DPEd. Mainly, trainee teachers are facing academic and administrative obstacles during this period like: huge academic and non-academic workload, physical and mental sickness, non-cooperation of head teachers and assistant teachers, family oriented work load, non-cooperation of family members, lack of proper supervision from instructors and AUEOs, lack of self-motivation and willingness to prepare guided materials including lesson plans, reflective journals, logbooks and other reports.

a. Immense academic work

The trainee teachers are facing difficulties due to huse academic work. Near about all of the teachers mentioned that the teacher-students ratio was more than 1:50 and schools have shortage of teachers. As per DPEd policy, the trainee teachers are entitled to conduct only four lessons in a day while they took more than 6/7 lessons. In addition, the trainee teachers are not authorized to conduct lessons on Thursday while they must be present in school. But the reality is not like as policy described by a trainee teacher:

> A large number of students are studying in our school while the number of teachers is insufficient. The class size is large and not manageable for a teacher to follow the DPEd philosophy. Due to lack of assistant teachers, I have to conduct more than 6. Classes in a day and sometimes the number of classes increased which is not affordable by me. For that reason, I am not able to follow proper guideline of DPEd and it's not possible for me to prepare lesson plan and materials for every class. Although at the end of this course we have to prepare all lesson plans as per school class routine.

The academic work not only includes taking lessons in the classes but also contains some other work like attending sub-cluster meetings, visiting students' home, conducting child survey, preparing class routine, developing annual lesson plan and work plan, mapping the catchment area, updating monitoring board, distributing books, arranging annual sports and study tour, working as admission officer and updating stipend related information. For example a trainee teacher said:

> I have to attend different academic activities out of my DPEd fourth term prescribed activities. I have to do child survey, class routine, annual lesson plan and work plan, catchment area mapping, annual sports and study tour, admission related work and so on. At the beginning of every academic year in January, we have to work as a team under the leadership of the head teacher. I think such kind of work hampers my regular DPEd activities in the first quarter of the academic year.

During in-depth interview with the instructors of PTIs' also we got similar opinion. For example an instructor stated that:

> In the fourth term of DPEd, the trainee teachers have to do lots of work including his/her regular official work. I received lots of phone calls from my supervised trainees. They told me that they have to conduct more than four classes in a day with some additional classes of other teachers.

b. Extensive non-academic work

The teachers of government primary schools have to attend different types of non-academic work along with academic work like updating voter information, arranging vaccination program, participating in different rallies and social events, working as polling officer at national and local government elections, organizing different meetings with parents and local community, arranging students council, SMC and PTA elections, participating in different programs of local government at upazila headquarters and so on. When DPEd trainees worked at their own school during fourth term of this course, s/he must participate in the above mentioned activities. These extensive non-academic activities obstructed trainee teachers' regular activities. For example a trainee teacher mentioned:

> I have to participate in different non-academic activities during my DPEd course at fourth term in my own school. Sometimes my head teacher requested me to participate in different meetings and rallies at upazila headquarters organized by the local government authority. In addition, I must be engaged in different national programs during my course. I think these events interrupt my regular DPEd activities.

Not only the trainee teachers but also the Instructors of PTIs' similarly pointed out this obstruction for practicing DPEd effectively at government primary schools. An instructor stated:

Trainee teachers have to engage with the non-academic work beside fourth term activity. Officially they are not entitled to do such kind of non-academic work during this period. But in most of the cases, head teachers and assistant teachers forced them to participate with the regular activities at school.

c. Physical/Mental sickness

Data show that some of the trainee teachers faced different challenges due to physical/mental sickness during DPEd fourth term activities. The fourth term is fixed with lots of work and activities. In this period, either a trainee teacher sickens physically or mentally or s/he will suffer a lot at the end of this course. Similarly a trainee teacher pointed out:

> I have been doing a lot of work at the fourth term of DPEd in own school. Starting my work in full swing at the very beginning of January, but unfortunately I can't continue due to my lack of physical fitness. The winter season has comes to Bangladesh at the end of December and continue until coming spring at the end of February. During this season, most of people especially the trainee teachers had been suffering from cold fever and seasonal sickness. I think, this sickness happened not only to me but also to my other colleague. I and my other companions had faced difficulty to fulfil the assigned workload of DPEd.

During interview with the teachers, nearly all of the head teachers mentioned that trainee teachers had furlough for 6-10 days at school during the fourth term of DPEd activities. They were enjoying this leave for reasons of sickness and sometimes for family program.

d. Non-cooperation of HT

The DPEd activities have been continuing with the support of all stakeholders of primary education including officials, instructors, head teachers, assistant teachers and trainees. For effective implementation of DPEd at the fourth term, the continuing of all stakeholders has to be ensured through active or passive participation. But the reality was not like that different from what we are thinking or expecting. The head teachers are not welcoming in his of her school and not supportive or cooperative also. For example a trainee teacher illustrated her experience as follows:

> It is my bad luck that I am working with a head teacher, who is not welcoming about DPEd. He believes that DPEd is creating extra pressure for him through 4th term attachment at my own school because he is liable to oversee all my activities. He suggested me to take six lessons in different classes and another special two classes for grade V students. I have to participate in about all activities of schools according to his order and arrogance.

Although the reverse scenario were found in some government primary schools, where the DPEd trainee teachers are working. In most of the cases, trainee teachers received proper supervision and mentoring from head teachers while a good number of trainees didn't get similar support. For example a trainee teacher said:

> I found my head teacher as a cooperative, supportive, who inspired me a lot to fulfill my duties of DPEd. He creates a lot of working environment at our school not only for me but also for all teachers. Specifically, he oversees my all activities regularly and makes a report monthly. In addition, he not only supervise my lesson plan, classroom practice, reflective journal and logbook but also mentors me for improving learning of DPEd.

e. Non-cooperation of AT

The trainee teachers of DPEd are also facing challenges from assistant teachers through their noncooperation. In most of the cases, assistant teachers are annoying to them in classroom organization and practice as per evidence-based learning of DPEd. The assistant teachers are not willing to corroborate the trainee teachers in classroom practice or management issue. Similar statement was received from a trainee teacher like as:

> It is difficult for me to apply evidence based-learning of DPEd at classroom without our teachers' support and cooperation. Yes, I am doing this difficult assignment in the last four months because I can't receive any support from our assistant teachers. They are not willing to talk about DPEd most of them have C-in-Ed. When I wanted to know or share something about DPEd, they said that they were not aware about DPEd. Most of the time they told me, "Do your job as you want. Its' your matter".

f. Non-cooperation of family

Non-cooperation of family members is another challenge for trainee teachers to implement DPEd at the fourth term in own schools. Data show that more than 75% trainees of DPEd are females and mainly they are facing this challenge steadily less than male trainees. In addition, married women are the challenged trainees in DPEd who are really in a disadvantageous situation at their home and schools. These trainees have to maintain families including their husbands, children, parents and so on. Analogous opinion was also found from a female trainee, as she said:

> I have a family including my husband, two kids, mother-in-law, two brothers and sister-in-laws. I am doing teaching with different limitations due to non-cooperation of my family members. My kids are under six and I have to feed and take care of them regularly. My mother-in-law has been suffering various illness for the last few years. For that reason, I have not enough opportunity to take preparation for my lesson.

Another trainees say that most of the female trainees are facing challenges in their home in doing their job. They have to fulfil both responsibilities simultaneously at home and school. For example a trainee stated:

> I have to meet 23 teachers standard at the end of my fourth term teaching practice at my own school. During this time I must conduct regular classes with lesson plan, reflective journal and logbook. Doing this job appropriately during DPEd, I need to work at night. But unfortunately I am unable to do this due to my family members' non-cooperation. I have to work at morning and night for my family members for preparing food, washing cloth and caring for family members.

g. Reluctance of Trainees

During interview with trainee teachers, researchers found that some of the trainees were not serious about their course and job responsibility. They showed reluctant attitude towards preparing lesson plans and teaching materials, doing regular activities and communicating with guide instructors. Similar kind of opinion was found from trainees' interview about their careless colleagues of DPEd like the following:

> We are not serious about these DPEd activities at the fourth term. Some of my colleagues are doing nothing during training period at their own school. They are not willing to participate on regular school activities

regardless the DPEd activities. Although at the end of this term, they prepared all these documents by other persons giving them money. In addition, some of our lethargic colleagues are coping from another trainee's documents to submit their portfolio finally at PTI.

Furthermore, different opinions were found about these indolent trainees who are showing their reluctant attitude at the beginning of DPEd. They mainly joined DPEd for passing one and a half years without doing anything. Research found such kind personal experience when they were supervising trainee teachers during school activities either at trainee schools or own school. When researchers asked to the trainees about such kind of issues, they described it descriptively. As cited someone's statement:

> We have to fulfil our responsibility at own school without proper supervision and monitoring of instructors or other officials. Some of my friends emphasize preparing papers for final viva at PTI however they are doing classes without lesson plan and teaching materials as they did before receiving this training. They mainly want a certificate from Dhaka University regardless of learning anything.

h. Improper of instructions

To ensure proper implementation of DPEd, trainee teachers need proper instruction when they needed. At the first three terms at PTI, the trainees received instruction at debriefing after coming from the school. They got opportunity to share their ideas and views with the other trainees and instructors. At that time, if they faced any difficulty to practice DPEd at trainee schools, they have good opportunity to get feedback. But at the own school activity, they have not such kind of opportunity to share their opinion and receive immediate feedback from experts. Similar statement came from trainee teachers' in-depth interview and a teacher said:

> I have to come a long distance for communication with my guide instructor and other colleagues to share my improvement and challenges. But I think it is difficult for guide instructors to supervise or mentor me through mobile phone. Because, we are more than 35 teachers conducting fourth tram activities under an instructor. If we called to the instructor regularly, s/he was not able to responds to all calls. On the other hand, Instructors came to visit us at URC once in two months for giving feedback and ensuring documents of final viva. S/he was not able to get feedback to all of us due to lack of time and number of trainees.

Conversely, the instructors of PTIs strongly disagreed with this issue and they pointed out that during one year of course work with trainee school activity, the trainee teachers received full support from them. In addition, when trainee teachers came to the own school for conducting fourth term activity, the instructors supervised and mentored them over phone regularly and once in two months at URC physically. For example, an instructor said:

> We are trying to meet all difficulties of trainee teachers about practicing DPEd at government primary schools during course work of PTIs in the first one year. After completing training school activity, regularly I tried to give feedback on their teaching learning activities at classroom, lesson plan and other important issues. At that time, the trainee teachers practiced 16 weeks at trainee schools received required support from both instructors and also from other trainees. On the other hand, I also

tried to communicate regularly over phone to supervise their fourth term activity and give feedback if they needed.

i. Insolence of officials

There are some other officials including AUEOs, assistant instructors and instructors of URCs are also liable to visit trainee teachers at own school during fourth term of DPEd while the reality is not desirable. In most of the cases, responsible officials do not came to see the own school activity. If some officials came to visit they didn't provide feedback on teaching learning issues. Analogous opinions come from a trainee teacher:

> The high officials of primary education came to visit our schoolin last month. When they heard from my head teacher that I was doing DPEd and now practicing own school activity, they wanted to observe my class. After observing my class, they gave me some positive feedback regarding classroom management, language, environment of classroom while they didn't talk about my teaching style, questioning and teaching learning activities. Finally, they inspired me to take class by following DPEd instructions.

j. Imbalance of time & workload

After one year course work of DPEd, trainee teacher comes to the school to practice own school activities while lots of other work are also waiting for them. Most of the time, head teachers and assistant teachers seemed that the trainee teacher came to school for helping them but the reality was different. The trainee teachers came to practice their fourth term activity as part of DPEd course. In addition, trainees have to do lots of work during this tenure as the partial fulfilment of DPEd while the time is limited to do these jobs. During interview, similarly said a trainee teacher:

> I have to do lots of work at fourth term as partial fulfilment of my DPEd degree. I have to prepare four lessonplans, teaching materials for these classes, write reflective journal and logbook regularly. In addition, I took another two-three classes as guideded my head teacher with other regular activities. Moreover, at the beginning of the academic year in January, I must have accompanied with other assistant teachers to do student survey, prepare catchment map, arrange annual sports, distribute books and so on. I think, the work is more than allocated time at fourth term.

Major Findings and Discussion

The curriculum of DPEd emphasises professional practice at training schools and own schools for ensuring practice effectively. In addition, not only the curriculum but also management handbook of PTI, assessment guideline and students' guideline of DPEd, and training school guideline of DPEd highlight to ensure practice. The DPEd was developed basing on constructivism theory whereas the neighboring country India also introduced teacher education at primary level following similar theoretical guidelines. Both countries emphasize practice at school level. For example in Bangladesh, trainees have to practice more half of the course time (48.5 credit hours out of 96 credit hours) (Hossain, et al., 2015)whereas in India, the trainees have to practice 40% of course time in addition to 20% practical work and 20% internship in teaching (in primary, upper-primary & Pre-school system) (Agrawal & Agrawal, 1994).

This study identified some challenges affecting good practice of DPEd at government primary schools. These obstacles are immense academic work, extensive academic work, physical/mental sickness, non-cooperation of head teachers, assistant teachers and family members, reluctance of trainees, improper instructions, insolence of officials, imbalance of time and workload. Similar challenges were identified by a study in Turkey. This study

identified that communication by student, classroom management, passivity of trainees, irregular attendance of trainees, transportation and non-cooperation of school administration are major challenges of prospective teachers and practicing classroom teachers encountered their problems which are related with carrying out of the teaching practice (Öksüz & Çevik, 2014). Furthermore, according to Breakell, Nishad and Das (2016) identifed that most obstacles of implementing DPEd at governemt primary schools is that the trainees get little support in schools from head teachers for his lack of time.

Another study was conducted in Spain and Mexico to identify the problems faced by beginning teachers in private elementary schools. This study categorizes all these challenges in broad three areas like academic problems, organizational problems and social problems (Tijerina & Sánchez, 2006) including workload, non-cooperation of teachers, administrators, lack of facilities and so on. Moreover, heavy workload, significant stress, no guidance and support at school also were illustrated as challenges for good practice at urban primary schools (Gaikhorst, Beishuizen, Roosenboom, & Volman, 2017).

Conclusion

Based on primary findings this study recommended effective practice of DPEd at trainee schools and own schools. These suggestions will help the policy makers, administrators and practitioners for further development of DPEd and its proper implementation at government primary schools. The recommendations of this study are to reduce workload of DPEd trainee teachers at fourth term in their own schools, ensure strong collaboration with PTIs and government primary schools, ensure close monitoring, mentoring and supervision for trainee teachers. In addition, the policy maker can revisit the DPEd policies for ensuring quality implementations at government primary schools.

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Rahman, Akanda & Shaha

An Analysis of Classroom Observations on the Use of Digital Content in English Subject at Grade IX-X

Md. Fazlur Rahman[a], Md. Owaliur Rahman Akanda[b] and Rahul Chandra Shaha[c]

[a] *Professor, Institute of Education and Research (IER), University of Dhaka*
[b] *Lecturer, Department of Education, Noakhali Science and Technology University*
[c] *Lecturer, Institute of Education and Research (IER), University of Chittagong*

This is the decade of Information and Communication Technologies (ICT), particularly with the popularity and accessibility of digital content (DC). Transition to digital content is not something that is new. It is just something that is gaining momentum as more and more schools are using it in the classroom. With the introduction and usage of DC in the classrooms it opens multiple windows for teaching-learning process. As a result, educators became more focused on the use of the DC to improve student learning and overall situation as a rationale. The use of DC in educational settings, by itself acts as a catalyst for change in this domain. This study focuses on analysis of classroom observations on the use of DC in English subject. A quantitative method was adopted to accomplish the study. Eight secondary schools were selected as a sample and structured classroom observation checklist was used as a tool to collect data from the schools. The in-depth analysis and findings revealed that learning environment in DC based classroom is up-to-mark although most of the schools have not enough physical facilities. Along with these, this study also reported that DC greatly influences students' classroom learning in terms of making their lesson easier, interesting and effective. At last, some suggestions are provided on the basis of findings.

Keywords: *Digital content, English Subject, Learning Environment*

Context and Justification of the Study

Now a days, Digital Content (DC) is broadly used in the different areas of language and its skills. In the same way, DC is also used in different areas of English teaching-learning process. The English classroom where DC is used has a number of benefits than conventional classroom. Researchers have urged a rethinking of the roles of digital technology in teaching and learning and consequently the development of learning theories and curricula that meet the needs of contemporary digital technology (Fleer, 2011; Yelland, 2011). Although many researchers and educators have advocated the importance of teaching and learning with technology and devoted themselves to investigating and implementing digital technology-related practises in classroom. The influence and use of technologies i.e. Digital Content (DC) on the development of teaching and learning are still controversial. Some researchers believe that the use of digital technologies may impede the learner's social, emotional, physical, and cognitive development (e.g., Armstrong & Casement, 2000; Cordes & Miller, 2000 as cited in Hsin, Li & Tsai, 2014), while others

support the use of technologies in improving learner's development in the aforementioned domains (e.g., Clements & Sarama, 2003; Plowman & McPake, 2013; Plowman & Stephen, 2003; Yelland, 2011 as cited in Hsin, Li & Tsai, 2014). With these in mind, how DC is being used in actual classroom situation of Bangladesh is judged by this study.

Digital Content is an array of electronic and internet content such as multimedia, audio, video, digitalised photographs and text, and graphic files (Aronowitz & Scott, 2010; Baker, 2010). Digital Content solutions can be as simple as providing existing textbook material in PDF format for use on convenient and less expensive laptops, net books, e-books or iPad. (Kelso & Halpin, 2010). From the above discussion, some core characteristics of the DC can be figured out in the perspective of education.
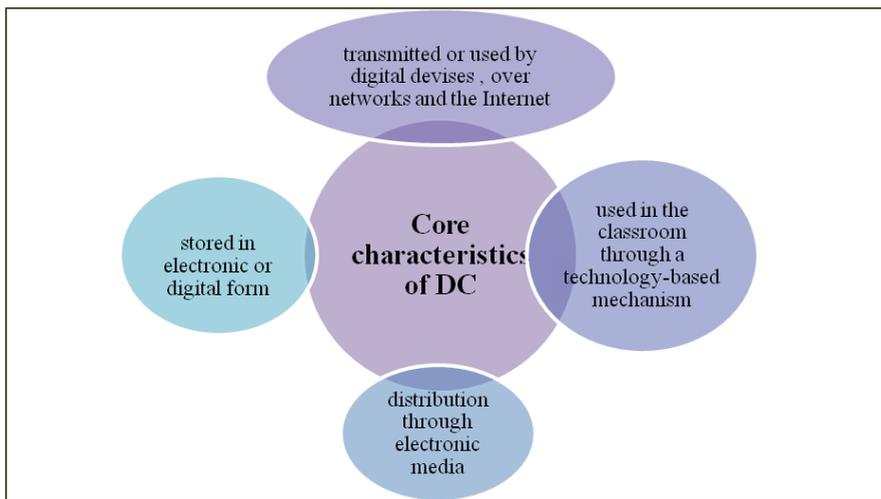

Figure-1: Core Characteristics of DC

Besides, this study will help in this way- one of the main aims of the modern education system is to form conditions for the teaching-learning content to be perceivable and learnable. One of such formats is DC. To use DC and to develop modern English teaching and learning services is one of the current Bangladeshi education policies. However, for tangible apprehension of such policy, the study is needed.

With a view to integrating ICT in education, the ICT policy and National education policy suggest preparing digital learning content and using it in the classroom. To observe the situation of using DC in the English classroom, the researchers have conducted this study.

Objectives of the Study
The central objective of the study was to explore the use of DC in English classroom. To achieve this central objective, the following specific research objectives were addressed:
1. to find out the physical facilities of classroom for using DC;
2. to identify the learning environment for DC based English class;
3. to figure out the DC's influence on students in the English class.

Methodology of the Study
In order to conduct this study the researchers have used quantitative method because of its nature and subject matter. Eight (08) mainstream secondary schools were taken as samples from Dhaka city through convenient random sampling process. Total eight English classes,

one class for two times (in total 16 times) were observed by classroom observation checklist.

An observation checklist was used to collect necessary information for this study. A structured observation checklist was prepared to stay on the focus of this study as observation checklist helps us to stay on the focus (Bell, 2005).To what extent teachers are using DC in English classroom and trends of teaching-learning process using DC is intended to address by this observation checklist. Data was analysed through simple statistics like percentage and frequency, and presented through graphs and charts.

Analysis of Data and Discussion
The classroom observations offer insights to grasp the actual situation. In this section, the researchers have analysed and presented data which is gathered from actual classroom observation regarding the use of DC in teaching and learning English at grade IX-X.

Physical Facilities of Classroom for Using DC
The use of DC in teaching learning process of English is much more dependent on physical facilities. Here, the findings about these are described. These data are found during classroom observations.
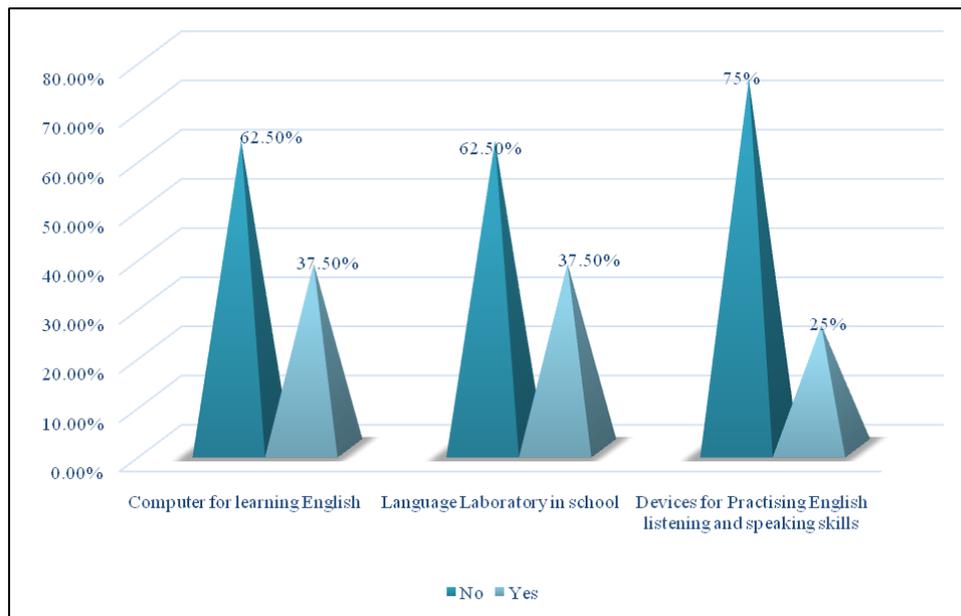
Figure-2: School physical facilities regarding DC

Data in the figure represent that only in 37.50% schools there are computers for learning English whereas 62.50% schools have no computer for learning English. Besides, in 37.50% schools there are language laboratories and 62.50% schools have no language laboratory. Moreover, in 25% schools there are devices for practising English listening and speaking skills whereas the vast majority (75%) schools have no devices. All of these reveal that physical facilities of the schools are not satisfactory.

This finding is closely consistent with the several studies and findings of different authors such as Chowdhury (2012) who reported that there is a lack of computers, multimedia facilities and internet connections in most institutions.

Teaching Learning Activities in Classroom Using DC
Teaching learning activities in English classroom using DC are presented graphically below.
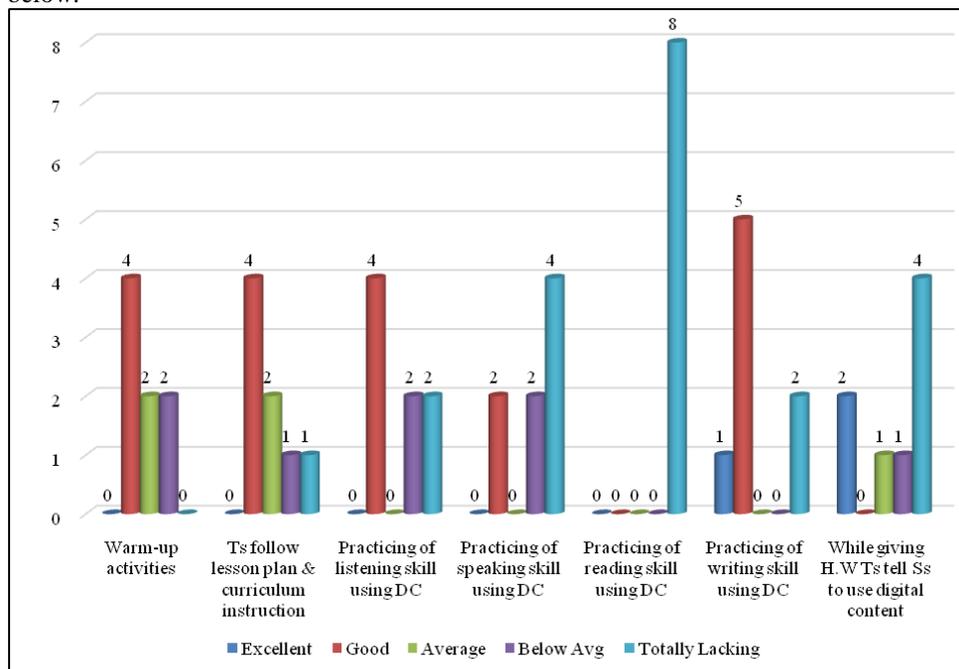
Figure-3: Teaching learning Activities in classroom using DC

The above bar chart explicates that in most of the classes, warm-up activities are good (50%), some classes are average (25%) and some classes are below average (25%). The status of following lesson plan and curriculum instruction by teachers is good in 50% classes, average in 25% classes, below average in 12.5% classes, and totally lacking in 12.5% classes. The status of practising of listening skill by using DC is good in 50% classes, below average in 25% classes, and totally lacking in 25% classes. The chart also indicates that the status of practising speaking skill by using DC is good in 25% classes, below average in 25% classes, and totally lacking in 50% classes. Moreover, the status of practising reading skill by using DC is totally lacking in 100% classes found by the researchers during the classroom observations. Furthermore, the status of practising writing skill by using DC is excellent in 12.5% classes, good in 62.5% classes and totally lacking in 25% classes. Finally the status of the statement 'While giving H.W teachers tell students to use DC' is excellent in 25% classes, average in 12.5% classes, below average in 12.5% cases, and totally lacking in 50% classes. So, it can be summarized that teaching learning activities in English classroom using DC are not so good.

Learning Environment in DC-Based Classroom
Through classroom observation checklist, the researchers have observed the learning environment in DC-based classroom which is depicted by the chart below.
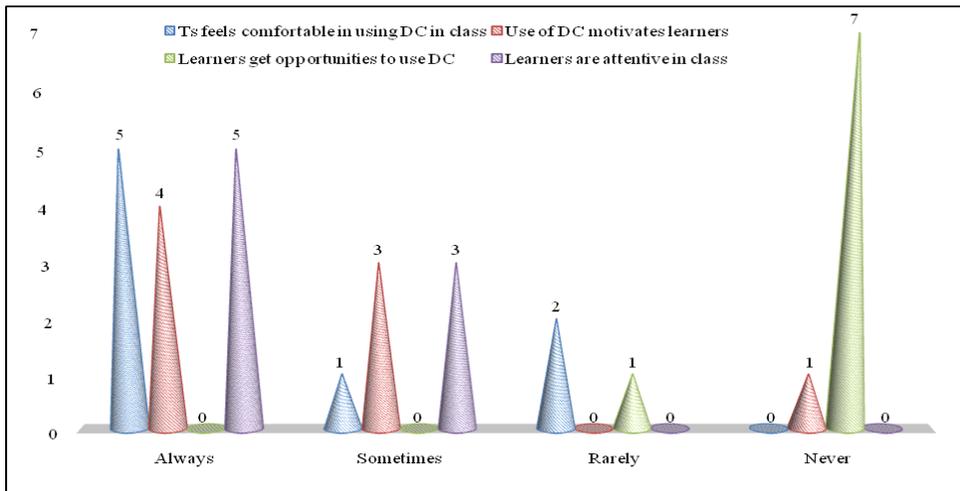
Figure-4: Learning Environment in DC-based classroom

According to overhead chart, it can be assumed that 62.50% (5 out of 8) teachers always feel comfortable in using DC in English classes, 12.5% (1 out of 8) teachers sometimes, and 25% (2 out of 8) teachers rarely. It can also be assumed that the use of DC always motivates 50% learners, sometimes motivates 37.5% learners and never motivates 12.5% learners. The chart shows one shocking but genuine scenario which is that 87.5% learners do not get any opportunities to use DC in classroom, just 12.5% learners rarely get opportunities to use DC. Furthermore, the chart also presents that in DC-based classes 62.5% learners are always attentive, and 37.5% learners are sometimes attentive.

DC Influences on Students in the Classroom
Influences of DC on students in the English classroom are presented here by the following figure.

Figure-5: DC influences on students in the classroom

In the vignettes above, it is clearly highlighted that DC plays a great influence on students in the classroom. It is strongly agreed that DC reflects the objectives of the lesson (in 50% cases); the usage of DC makes the lesson easier and interesting (in 62.5% cases); the usage of DC makes the lesson more effective (in 50% cases); students like the DC (in 25% cases); and DC helps the students to concentrate their attention on the lesson (in 25% cases). Besides, it is agreed that in 50% cases DC helps the students to concentrate their attention on the lesson, and students like DC. In reverse, it is disagreed that usage of DC makes the lesson easier and interesting (in 37.5% cases); in 25% cases students like the DC; the usage of DC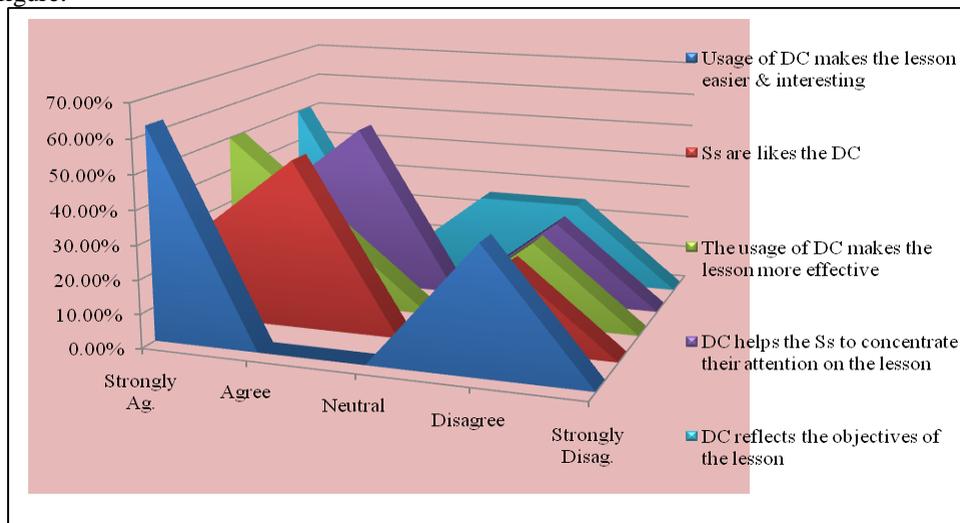 makes the lesson more effective; DC helps the students to concentrate their attention on the lesson; and DC reflects the objectives of the lesson.

In this regard, Sharmin (2013) observed drastic change in every student's behaviour after integrating computer to their lessons. As the ICT tool combined text, sound and colourful, moving images (which are also a part of the DC) engaged students in the learning process and increased learner's motivation. This also suggested by Tinio (2009).

Where learners use digital learning at home as well as school for formal and non-formal learning activities these have positive effects on their attainment, because they have extended their learning time (ICF, 2015). Buckingham & Willett (2006); Kimber & Claire (2008); Prensky (2001) also claim that today's technologies allow children to engage with digital text on a regular basis outside school.

DC and Scenario of Technical Parameters
DC and scenario of technical parameters used in the English classroom are presented here via a graphic representation.
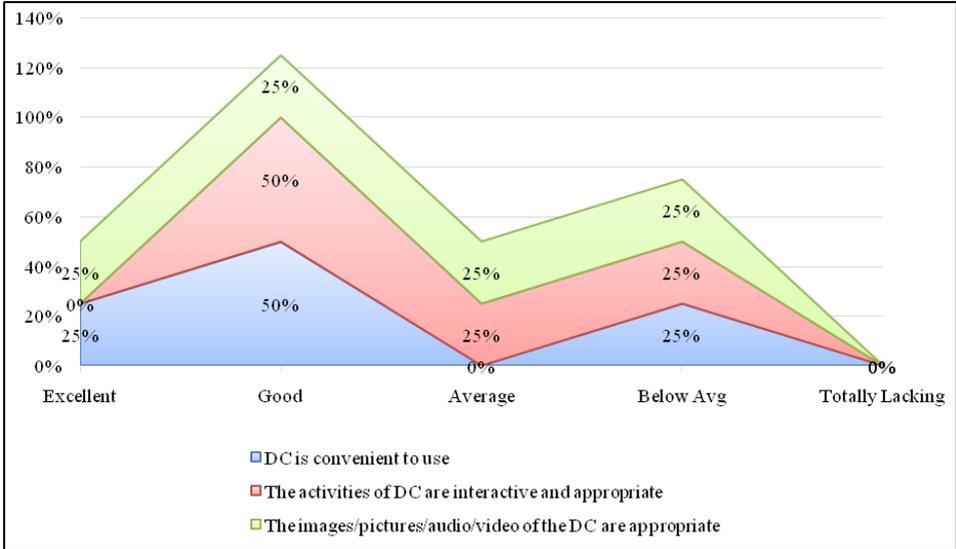
Figure-6: DC and scenario of technical parameters

The figure-6 vividly shows that DC is convenient to use is marked as excellent (in 25% cases), and in 25% cases the used images/pictures/audios/videos of the DC are appropriate and found excellent. Besides, in 50% cases it is marked as good that DC is convenient to use and the activities of DC are interactive and appropriate. In addition, in 25% cases it is marked as average that the activities of DC are interactive and appropriate and the

images/pictures/audios/videos of the DC are appropriate. Furthermore, in 25% cases it is marked as below average that the activities of DC are interactive and appropriate, DC is convenient to use and the used images/pictures/audios/videos of DC are appropriate.

After all, it can be generalized that the used DC and its scenario have fulfilled the technical parameters.

DC and Scenario of Implementation
In this part, the DC and its scenario of implementation are presented graphically and analysed.
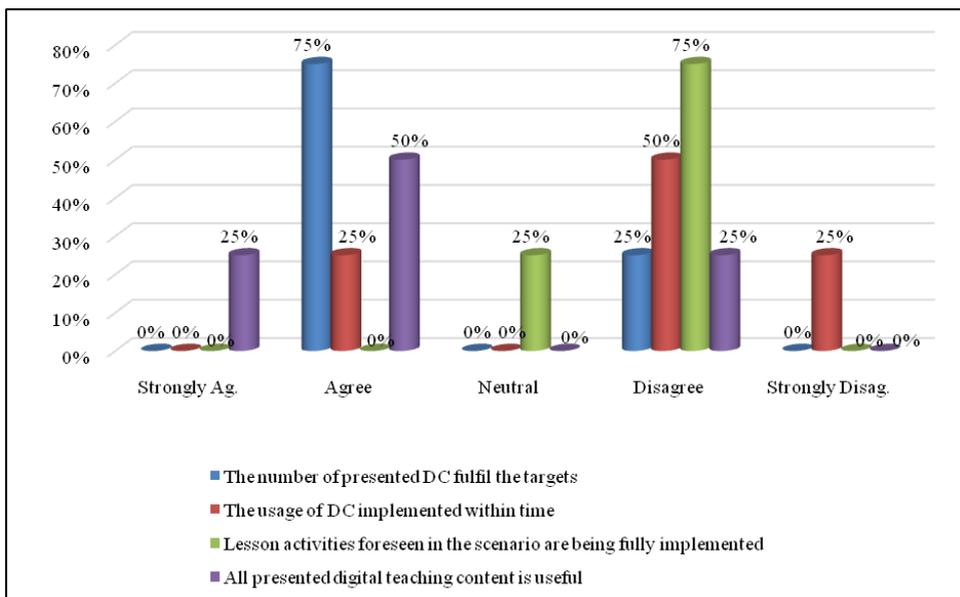
Figure-7: DC and it's scenario of implementation

The figure above gives a picture of three specific implementation scenarios of DC. By this figure, it is strongly agreed that in 25% cases all presented digital teaching content is useful. Besides, it is agreed that in 62.5% cases the number of presented DC fulfils the targets; in 50% cases all presented digital teaching content is useful; and in 25% cases the usage of DC is implemented within time. By seeing this figure, it is disagreed that in 75% cases lesson activities foreseen in the scenario are being fully implemented; in 50% cases the usage of DC is implemented within time; and in 25% cases the number of presented DC fulfils the targets and all the presented digital teaching content is useful. Furthermore, it is strongly disagreed that in 25% cases the usage of DC is implemented within time. So, it can be generalized that used DC is not fully implemented.

Required Information Regarding of DC
Some required information like benefits, challenges, teachers' skills etc. regarding DC are analysed and presented here through a graph.

Figure-8: Required information regarding DC

Data in the figure explicate that it can be strongly agreed that in 50% cases DC used is subject related, class size is suitable for using DC, and teachers have enough skills for using DC. In 75% cases DC gives scope for participation of students in planned activities, in 12.5% cases teachers are able to complete class within time by using DC, and in some cases teachers' role is decreasing for using DC. Besides, it is agreed that in 75% cases enough facilities are available for using DC; in 62.5% cases students are engaged in teaching-learning activities through using DC; in 50% cases class size is suitable for using DC; in 37.5% cases teachers' role is decreasing for using DC; equally in 25% cases enough facilities are available for using DC, DC gives scope for participation of students in planned activities; DC also helps teachers to assess students effectively and usage of DC misleads teachers.
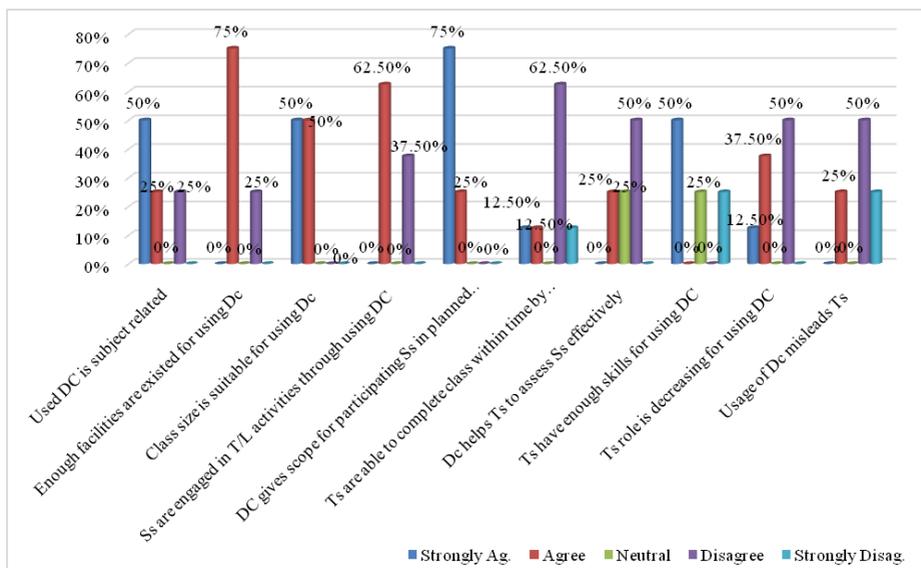
In contrast, it is disagreed that in 62.5% cases teachers are able to complete class within time by using DC; in 50% cases DC helps teachers to assess students effectively; teachers' role is decreasing for using DC, and usage of DC misleads teachers; in 37.50% cases students are engaged in teaching-learning activities through using DC; in 25% cases used DC is subject related and enough facilities are available for using DC. Moreover, it is strongly disagreed that in 25% cases teachers have enough skills for using DC and usage of DC misleads teachers; and in 12.50% cases teachers are able to complete class within time by using DC.

And it can neutrally be conferred that in 25% cases teachers have enough skills for using DC, and DC helps teachers to assess students effectively.

In the light of the discussion, it can be summarized that usages of DC in the teaching-learning process of English follow the above mentioned criteria.

In regard to this finding, Higgins, Xiao, Katsipataki (2012) provide a summary of research findings from their studies with experimental and quasi-experimental designs, which have been combined in meta-analyses to assess the impact of digital learning in schools. Their

search identified 48 studies which synthesised empirical research of the impact of digital tools and resources on the attainment of school age learners (5-18 year olds). They found consistent but small positive associations between digital learning and educational outcomes. Of the 48 studies, 44 (92%) showed positive effects in favour of a computer assisted intervention (where Digital content was also included), while four (8%) were negative and favoured a traditional instruction method. Classroom teaching-learning activates are closely related in this context.

Major Findings
The researchers sum up the findings related to the research objectives. The major findings of this research study encompass the followings (ordered as to importance):

- ➢ Most of the schools have not enough physical facilities; only 37.50% schools have computers and language laboratory for learning English and in 25% schools there are devices for practising English listening and speaking skills.
- ➢ In most of the cases, teaching learning activities in English classroom using DC are not so good.
- ➢ In most of the schools, learning environment in DC-based classroom is up-to-mark. Wherein 62.50% (5 out of 8) teachers always feel comfortable in using DC in English classes, almost 87.50% learners get motivated and 62.5% learners are always attentive in DC-based English classes.
- ➢ In most of the cases, DC plays a great influence on students' classroom learning in terms of making their lesson easier, interesting and effective, concentrating students' attention on the lesson, and reflecting objectives of the lesson.
- ➢ In maximum schools, the use of DC and its scenario have fulfilled the technical parameters although use of DC is not fully exploited.
- ➢ It has been found that in 50% cases used DC is subject related, class size is suitable for using DC, and teachers have enough skills for using DC.
- ➢ In 75% cases DC gives scope for participation of students in planned activities.
- ➢ In 12.5% cases teachers are able to complete their English class within time by using DC, and equally in 12.5% cases teachers' role are decreasing for using DC.

Recommendations and Conclusion
Based on the emerged findings of this study the following recommendations have been made for consideration:

- • Schools should be provided with sufficient equipment.
- • Teaching learning activities in English classroom using DC and learning environment in DC-based classroom should be interactive and pre-planned.
- • Teachers should get training on effective use of DC in the classroom so that the use of DC in English class takes the full advantage.
- • DC-based classroom should be designed in such a way e.g. according to pedagogy and TPACK model so that teachers can complete the class within budgeted time and their role is neither ignored nor decreased.
- • Finally, more attention should be paid to specific roles of DC in the offering of good teaching practices, delivering individualized and collaborative teaching-learning process, connecting individuals to a larger community on a continuous basis, and promoting teacher-to-students and students-to-students collaboration.

ICTs have the potential to accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change (Davis

and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005). In a rapidly changing world, DC which is one of the remarkable parts of ICT is essential for classroom teaching-learning. At the end of the study, the researchers tend to suggest that the scientific use of DC in English classroom is essential for achieving the goals of education. Further research will be conducted on the usage of DC in other classrooms and other disciplines.

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Ziauddin & Rahman

Deprivation in Education of Child Laborer in Dhaka City

Shah Md. Ziauddin[a] and Mohammad Mojibur Rahman[b]

[a] Doctoral Student at Lapland University, Finland
[b] Associate Professor, Institute of Education and Research, University of Dhaka

The aim of this paper is to discuss the causes particularly how child laborer work and their consequence hamper them to achieve education as their basic human right. If anybody is deprived of education in childhood then he/she can never grow up with honor and dignity in a society. This study finds facts through which children lose their invaluable childhood and their fundamental right to education subsequently they are also deprived of their physical, mental, and emotional progress. The ongoing child labor is the product of our concurrent social mechanism and limited attention from policy implementation by the policy makers. Apart from that opportunity inequality is also identified, in this study, as one of the major causes of child labor deprivation of education in Dhaka city.

Key words: *Children engagements, Child labor, Education*

1. Introduction
1.1 Background of the study
Universal secondary education and quality of learning have been adopted by the international community as the sustainable development goals (SDG) for 2030. Child labor, which remains endemic in many poor countries, represents an obstacle to both goals (Quattri and Watkins 2016). Universal education is one the most basic human rights. In the childhood if children work for subsistence then they lose their basic rights particularly of education and subsequently they are not able to flourish their life in normal pace. Therefore, child labor should be eliminated and replaced by universal education, because this is the way to protect and promote the rights of children (Ahmed, Uddin & Hossain 2009). Generally it is assumed that children who are engaged with child labor massively they are from underprivileged families. They do not have the opportunity to receive education, proper healthcare, shelter and even passing childhood time like ordinary children. Primarily poverty is considered as the principal cause of this social problem which forces children to become child laborer (Blanchet 1999). Bangladesh has ratified CRC "Convention on the rights of the Children" in January in 1990. Child labor is legally restricted in many countries; the ILO estimated that there were 211 million children aged between 5 to 14 at work in economic activity in the world in 2000. After one and half decades, the ILO report 2016 shows that still globally 168 million children remain trapped in child labour. Bangladesh Bureau of Statistics 2015 report indicates that there are now as many as 3.45 million child labourers in the country. Ten years before, when the BBS published its last report, 3.2 million children were in active labour. So, in 10 years, child labour has increased around 250,000. Data from the same report manifests that 1.228 million children are engaged in hazardous jobs at this moment. Child labor is one of the

severest forms of child exploitation and child abuse in the world today. In the 21st century, an individual's wellbeing increasingly depends on literacy, numeracy and intellectual competence, and on the other hand, missing of these opportunities means to a child labor in fact his/her future is denied. Children has the rights to be children; to be loved, cherished, educated, nourished, clothed, pampered and fostered as children when they are children (Hasnat, 1995). Child laborer who are deprived of their right to schooling and play with friends to enjoy childhood subsequently they fail to achieve full physical, psychological and intellectual development.

1.2 Objectives of the study
Children are one of the major sections of our society which we can tarm as a class or specific social group. Children are engaged in different kinds of work in order to earn money to support their families instead of attending school, playing with friends participating different social and recreational activities.

The core objective of the study is intended to:
- Examine the root causes of children engaged in occupations
- Assess the consequences of children engaged in occupations

The key research question of the study is:
- How children engagements in occupations hamper and deprive them of achieving their basic education in Dhaka City?

1.3 Conceptual clarification on Child Labor Issue
Child labor in Bangladesh is the result of socioeconomic consequences such as mass poverty, unemployment and the weakness in the implementation process of compulsory primary education along with other factors. To reduce or eradicate child labor from society, there are needed united attempts are needed not only by government or NGO's but also by the support of all sections of social communities. In this regard strategic and effective measures can minimize the hardship and sufferings of the underprivileged working children.

1.3.1 Who is a Child?
Article 1 of the 1989 UN Convention on the rights of the child (CRC) which has been ratified by Bangladesh, defines a child as a human being below the age of 18 years unless under the law applicable to the child, majority is attained earlier. In other words the conventions permit each state party to conform to its own laws and customs in this regard. The pluralistic legal system in Bangladesh permits the parallel existence of religious laws, which set age standards on the basis of gender. Under Muslim laws a child becomes an adult on attaining the age of puberty or sexual maturity. Female children in this case are said to attain the age puberty much earlier than boys. Gender segregation is respect of setting age standards is also evident in the child marriage Restraint Act 1929 where the age of majority is defined in terms of contracting marriage which has been set at 21 years for males and 18 years for females. It is transparent from the above discussion that there is no unison or uniformity regarding the age of a child given that these laws were framed at different time responding to different social conditions. It is contended that the lack of uniformity as to the age of a child who is eligible to work under both domestic and international legal standards leads to confusion in deciding whether a particular worker is a child or not.

1.3.2 What is meant by child labor?

It is necessary to clarify what is not meant by the term child labor. Children or adolescent participation in work that does not affect their health and personal development or interfere with their schooling is generally regarded as being something positive. This includes activities such as helping their parents care for home and the family, assisting in a family business or earning pocket money outside school hours and during school holidays. It contributes to children's development and to the welfare of their families and it provides them with skills, attitudes and experiences, and helps to prepare them to be useful and productive members of society during their adult life. In no way can such activities be equated with child labor. Child labour Refers to the work that:

- Is mentally, physically, socially, or morally dangerous and harmful to children and
- Interferes with their schooling
- Deprives them of the opportunity to attend school
- Obliges them to leave school prematurely
- Requires them to attempt to combine school attendance with excessively long and heavy work

2. Review of Literature

According to ILO (2001) there are 301 types of child labor activities in Bangladesh and 48 types are considered to be hazardous forms of work. Elimination of child labor from hazardous work is the major challenge for the government and relevant national and international agencies on child labor issue. Ahmed & Quasem (1991) mentioned that trade, hotel and restaurants accounted for the highest share of employment (23.7%) followed by community and personal services (21.5%) manufacturing (17.2%) and transport, storage and communication (12.1%) for recruiting child labors. The socio-economic condition is responsible for the increase of child labor problem, like the price inflation, overpopulation, urban migration of poor people from rural areas whose property has been damaged by river soil erosion, natural disaster also meaningfully contributing to the acerbity of the problem. Inequalities in society particularly for material, gender, structural, political, economic policies altogether impact on the process of child labor growth (Marcus and Harper 1996, White 2001). Lack of awareness of rights and laws amongst children and adults also play a role on child labor issue (Child workers in Asia, 1988).

Children's aversion to school due to low quality provision, corporal punishment, etc. also encourage child labor (BBS, 1996) Low rates of literacy in Bangladesh are thought to contribute to children's aversion to education as parents do not encourage the education of their children, Low wage of parents, necessity other income sources for the household (King and Marcus 2000). Quattri and Watkins (2016) found in their study that child labor keeps children out of school, hinders effective learning and denies children an opportunity to acquire the knowledge and skills they need to escape poverty. Ill health of a family member and the effects of drug abuse create pressure on young children to engage in income generating activities (Blanchet 2001). There are economic attractions of industry in the urban areas, such as garments manufacturing, which are alluring for those that would welcome an additional income - also causing substantial rural and urban migration (Rahman, 1996). Work is considered to be an opportunity for children to learn valuable skills for future employment (Rahman 1996; Ahmed & Quasem, 1991; Delap 2001). The issue of child labor has long been viewed with a mixture of indifference and skepticism but in the last decade the situation has changed dramatically. Child labor has attracted growing

attention both within countries and at the international level and has emerged as the single most important source of child exploitation and the abuse in the world today. As a result of growing awareness on the issue and the recognition that the use of child labor is not conducive to promoting long term economic development, a large number of countries are attempting to eliminate it (Haspels and Jankanish 2000). Fight against child labor and the responsibility falls on to everyone (ILO 2000). Governments, employers, trade unions, international organizations, teachers, social workers, parents, children themselves, experts and civil society organizations must play their role. Trade unions have particularly a unique and important role to play. Above all, Bangladesh government must take stern action to ensure education to all children by making law and allocating required support. In this regard, Quattri and Watkins (2016) have assessed that Bangladesh will not achieve the (SDG) 2030 development goals on education and other objectives without a strengthened commitment to eradicate child labor; and the country will not eradicate child labor without making education compulsory and free for the 6–14 age group.

3. Methods
In order to understand the reality of child labor, this study only encompasses some selected sectors of hazardous occupations of child laborer such as working restaurant and canteen boys, vegetable vendors, automobile workshop workers, shops and establishment assistants, and Tokai/street children. This research was conducted through qualitative approach. Research through qualitative approach focuses on describing, understanding and interpreting social phenomena and processes. This research work preceded by informal interview schedule for quick and precise qualitative data collection and follow-up unstructured interview method because in this system there is direct contact between the respondent and the informant. While child laborers were busy in their work places; for the facilitation of the research, interview questionnaire was developed and conducted. To collect specific job life narratives from child labor, some case studies were undertaken. Overall this research used the qualitative approach to collect, generate data and data analysis for the textual context. For ethical consideration most of the respondent's pseudonyms were used in the research. For analysis the collected data, relational and thematic analysis were done for constructing data to text writing process and finally to find out the findings of the study.

This research was conducted especially in ward number 53/59 at Noyatala of Moghbazar area and two hall canteens (Surjasen & Jasimuddin) of Dhaka University among 50 respondents (among the respondents, there were 10 child labor parents, 15 restaurant and canteen boys, 5 vegetable vendors, 5 automobile workshop workers, 5 shop and establishment assistants, and 10 Tokai/street children) in Dhaka metropolitan city. In Mogbazar areas, there are around fourteen slums where maximum respondents of the study dwell.

4. Findings and discussions
4.1. Socioeconomic condition of the Child labor families
Almost all of the child labor respondents in this research except the canteen boys at Dhaka University and Tokai or street children live in the slum areas with their families. Most of the canteen boys are from rural marginal farmer and poor families from different districts of Bangladesh.

The main reason of child laborer parents to choose slum areas as their living place is because insued there is low cost housing with minimal civic facilities to maintain a family life. As slums are located inside the Dhaka city; therefore, slum people can easily move to

working places. All of the slum dwellers are homogenous in the sense of poverty, illiteracy and scarcity of resources.

All of respondents from child labor parents in the slum areas informed that they maintain get their subsistence by working on daily basis work such as women working in the garments and housemaid of different rich families. On the other hand, men work as rickshaw pullers, do manual working, garments, constructions, and workload guards of different houses and business centers in the city.

4.2. Discussion on Child Labor working situations and the consequences which deprive them from Education

4.2.1 Restaurants and Canteen

Most of the hotels and restaurants in Dhaka city or even in university hall canteens have a big number of boys who work there as hotel and canteen boys as well as kitchen assistants. In most of the cases, they are under ages between 10 to 17 years. They work there with minimum wages that are relatively lower than the adult workers. On an average, they work around 10 to 12 hours per day. They work there not only for their own subsistence but also to support their respective families. Working in the restaurant and canteen is considered as one of the hazardous job for the children. In many cases the overall condition of the restaurants and canteens are unhygienic. It compels them to take contaminated food and water. Many incidents are reported in the study that happen to restaurant and canteen child workers such as fire accident, and suffering from gaseous toxicity, gastritis, diarrhea, dysentery, and headache. Regarding educational opportunity, most of the respondents replied that due to prolonged hours of work, they do not have opportunity to receive either formal or informal education. Moreover, owners of the restaurants and canteens are not interested to allow them to attend informal school if opportunity isavailable.

- **Case study**: Sarwar Alam is 13 years old boy who works in Surjasen hall canteen at Dhaka University for the last three years. He is from Chandpur district. Sarwar's father was a manual worker. When Sarwar was studying in a primary school at three in his village that time his father diagnosed in a serious disease after that his father become paralyzed and stopped working and at that time his family was in big trouble. Due to his father's illness, his family was afflicted for financial crisis because they needed to borrow loan for his father's treatment. For his father's treatment and family subsistence, his family becomes indebted toothers. To solve family's financial problem, he started to work at the age of nine in his village. He had intense desire to study but due to family's economic situation, he couldn't continue his study. However, a year later on one of his friends informed him to move to Dhaka and work at university hall canteen. Since then he has been working at Surjasen hall as a canteen boy. Everyday he works there from 6:00 am to 10: pm. One year ago he got an opportunity to study in a voluntary school "Paathshala" at Surjasen hall. After studying there for a couple of months, he was inspired to complete his primary education. Unfortunately the school closed due to insufficient cooperation from university authority and at the same time his window of hope was also closed forever to finish his informal primary education.

4.2.2. Vegetable Vendors

Generally vendors have to buy their goods from the wholesale market where prices are lower so that after bringing vegetables and other food items from distant places to Dhaka city they can sell at good price. In most cases, vendors buy their vegetables from Savar,

Jatrabari and Karwan Bazar wholesale markets. Every day in early morning at 5:00 am they have to go there to bring vegetables, fishes and other items thus they start to sale by walking and dragging a rickshaw van in the residential areas of the city. Some of them carry vegetables and fishes on their head and move around the residential area for selling. They have to walk around with heavy weight of vegetable on head until completion of selling. In the interview most of the respondents of vendors answered that by doing this job frequently they suffer from headache, backbone pain, joint pain, dysentery, cold and cough and skin irritation. As they have to spend a longer period of time for selling of goods; therefore, they do not have chance to study and go to school.

- **Case study:** Mohammad Shaheen is a sixteen years old boy who supports his family's subsistence through selling fish and vegetables for the last four years. Due to family's financial crisis, Shaheen had to quit his study when he was in class four. He lives in a slum at Mogbazar, Dhaka with his parents. He has two brothers and two sisters. Shahen wakes up very early in the morning and goes to Jatrabari and sometimes he goes to Savar to bring vegetables and fishes. After bringing such goods, he walks around Moghbazar residential areas from 7.00 am til 12:00 pm and in the evening time he sells fishes at the turning point of railway gate at Mogbazar. Every day he has to walk around 6 to 12 kilometers to sell his vegetables and fishes. By doing this business, he could profit from 150 to 200 taka per day which is very important for his family's expenses. Moreover, he has an additional job that is to sell recycling paper bags to the grocery or departmental stores. His old parents generally make such bags at home and by selling the bags he could earn about 50 to 70 taka. The difficulty of his business is that he has to buy his goods from Jatrabari or Savar which are a long distance from his living place. After completing his selling when he returns home, he feels exhausted. He has no available time to study or go to school.

4.2.3 Automobile workshops

Child workers in the automobile workshop are needed to work with sharp and rotating equipment, electricity, heavy machinery, paint (lead) and other useful chemical substance that expose them to dirty working environment. A good number of children work in the automobile workshops all around the country. In the automobile workshop, work for children is hazardous because it has the risk of accidents and physical injuries. Several thousand children work as novices for minimum wages in Dhaka City. All of the respondents in this study opined that by working in automobile workshop they usually have problems such as accident trauma, ulceration of hands, lead poising, and bronchitis. They have no time to study or go to school.

- **Case study:** Shakil Ahmed is a 15 years old boy working in a motor garage service center at Mogbazar of Dhaka for last two years. His family moved to Dhaka from Bhagerhat of Khulna five years ago due to debt and having the hope to changes the fortune of their life in the capital. Now he is living with his mother and two younger brothers at Modhubag slum in Moghbazar area. While he was in the village he used to study in class five in a primary school there. At the age of eleven when his father divorced his mother and left them then he started to work in a garage and still he continues working there. In the beginning of his work in the garage the owner offered him nothing except slight snacks at noon. After six months, the owner started to pay him 50 taka each day with two meals. His job assignment is to bring the heavy vehicle's wheel and tube, help the mechanics to attach the wheel and tube with the vehicle. If any mistake was made by him in the workplace the other workers rebuke and occasionally beat him and scold him. After finishing his work when he arrives home he becomes half dead. He never told his sufferings to his family members.

Garage environment always remains filthy and smoky because welding, drilling, repairing, coloring and full of heavy sound make the place very different. Recently he has irritation problem. His health is going to break down and physically he doesn't feel any happiness. As he works the whole day in the garage he doesn't have time to study or go to any School.

4.2.4 Shops and Establishments Assistant

Shop or business owners have huge interest in hiring child labor in order to do manual work in their entrepreneurship. Shops like hardware, grocery, establishments, construction, medium range factories, garment shops, furniture shops usually hire a good numbers of child labor across the country. Child laborer in all of these sectors frequently experience difficulties and challenges. This study found that during the work child laborer experienced different incidents such as ulceration of hands and legs, accident trauma, headache, joint pain, backbone pain, difficulty in breathing, cold and cough. As they work the whole day, they do not have time to study.

- **Case study:** Anwar Hussein is a fourteen years old boy who works in a furniture shop for the last two years. He is from one of the northernmost district of Bangladesh of Kurigram and lives in a slum at Moghbazar. Anwar has completed his primary education and thus he couldn't pursue his high school education due to his family's economic crisis. To search for better future he migrated to Dhaka four years ago and now working in a furniture shop. As he is working fulltime now he has no option to continue his studies. He goes to the furniture shop early in the morning at 8.00 am and returns home at 9.00 pm after working about 13 hours a day. He usually cleans the shop, arranges the furniture, for dispatch and delivery to the customers' vehicle. To him, the furniture box and items are heavily weighted what he sometimes failed to carry properly. Most of the time he got hurt in his hand and sometimes it cut the skin of his hands.

4.2.5 Tokai or Street Children

Tokai or street children are one of the major social problems in Dhaka city. They do not have deferent shelter or living place. All of them are living on the street footpath, corner or edges across Dhaka city. Generally they do not do any specific work except informal activities such as street begging, vendors or manual work on daily basis. The most common thing for them is that they collect different scrapped items, papers, plastics, polythine, waste materials from the garbage van or from the road or streets in both commercial and residential areas. They handle unsafe, dirty, and contaminated substances with bare hands such as garbage, broken glasses, and splinters. As a consequence, they are exposed to bacteria, virus, fungus, and parasites etc., which make them prone to develop diarrhea, typhoid fever, influenza, tuberculosis, and skin disease, ulceration in hands and feet, headache and loss of weight. As they do not belong to a family or any organization, they are vagabond in urban places. All of the respondents in this study opine that they never feel the necessity to go school.

- **Case study:** Sagor is a 9 years old boy and works as a Tokai. He doesn't know whether his father or mother is still alive or dead and even his birth place or address. In his earlier days, he would stay in Komlapur railway station with his grandmother. She was the only survived person of Sagor as a close relative. After every one or two weeks he used to meet her and pay a little amount of money from his earnings because she was old and couldn't work anything except begging. After her death, Sagor now stays at Mogbazar area at different nights in different places. He wakes up very early in the morning basically after Fajar azan and starts his job to search for waste paper,

recycling paper, plastic elements, iron/rod, and polythyne. By searching the whole day he is able to collect 5 to 10 kilograms of valuable wastage to sell. Thus he goes to Mogbazar railway line where one of his clients stays to buy waste paper from the Tokai. Sagor always sells his collection to this buyer. Everyday approximately he can earn 100 to 120 taka by selling his collections. The bigger amount of his earning is spent for his meal and snacks a day. Through this work he can earn independently. He doesn't like to work under anyone. His body always seems to be covered with dust and dirt. He usually takes his bath when he goes to Dhaka University or Dhanmondi area and to Dhanmondi Lake. Sagor looks very thin and weak. Most of the time he suffers from stomach pain and fever. Regarding the question of education he replied that he never attended school or nobody requested him to do so.

4.3. Perception of child labor families on their child workers

Every child labor family is under financial crisis. Their parents cannot fulfill their demand. Parents send their children at an early age work, just to earn money and assist their family's maintenance. Children ages when turn into six or seven thus parents in slum areas usually thought that if children in such ages can involve with any particular work it will be beneficial both for the family and the child's future career because through the job they could earn money and learn the skill of the job. Traditionally such thought and perception are actively functional in most of the child labor parents' mind. They don't apprehend the vulnerability and risks of jobs. Their feeling regarding accident or risk is misfortune. Having poverty in their life, parents cannot think that their children will be educated in schools or colleges and could obtain dignified and professional job or would be able to lead a prestigious life. Regarding the missing of the basic rights of children especially education, parents are not fully aware of it because they view that where they cannot properly manage daily meal they could not think about their child's better education and future.

4.4 Discussion regarding the impact of Child Labor on their educational life

Most of the child labor respondents opined that due to financial problem they were not able to continue their education. On the other hand, after involving in child labor activities they have no time to attend any formal or informal schooling. Most of the child laborers have the experience of attending on an average class two or three at school and few of them class five in primary level education except the Tokai or street children. Regarding educating child laborer, informal education opportunity towards child laborer is insufficient in Dhaka City. Moreover, employers are not interested and do not give chance to the child laborer to attend informal school. Most of the child labor are engaged for a long period in their work and as a result they have no time to study or attend any form of schooling. A child's prospects for improvement in the future years depend to a large extent on the kind of education and training he/she receives as well as the circumstances and availability of opportunities. When a child engaged in a precarious and insignificant job from an early age thus he/she gets very little chance to acquire education and skill for better jobs. This together with a child's natural disinclination to learn put an end to his/her chances for better employment in future. Child laborers have no opportunity to gain education even though some institutions support free education but due to their family's economic miseries for which reason they are forced to return to their work. Regular hard work creates physical problems to child laborers such as body pain, headache, fever, sneezing, diarrhea; dysentery, cough etc. as common health problems. Periodically they also suffer from physical torture and verbal abuse. Missing childhood with basic rights means misfortune and ultimately they miss the chance to be educated and to lead a chosen life with dignity and pleasure. As they could not possess formal educational training and skills they do not have tangible social mobility.

4.5. Based on the findings from the study, this research sets out a number of key recommendations. These include:

- Universal primary education has to be ensured at any cost to all of the child laborers; moreover, they should be given special attention and allocation of financial support.
- In the national education policy, eradication of child labor should be included as the central objective of the policy.
- Increasing overall education budget or financing for education with a greater emphasis on provision in slum areas, street children and on children from impoverished families.
- Improving the quality of education in slum areas and enhancing the school readiness of slum-dwelling children.
- Supplementing financial support as cash transfer to primary and junior levels to slum-dwelling children.
- Strengthening the regulatory agencies for child labor by ratifying ILO Convention 138 on the minimum age for admission to employment and work
- Imposing more fines or penalty on employers found to be employing under-age workers
- Social awareness has to be improved regarding the negative consequences of the child labor in the society
- More private initiatives have to come forward to solve this social problem in Dhaka city especially the philanthropic business, social communities including private individuals

5. Conclusion

Deprivation in education of child laborer is one of the major social problems in Bangladesh including Dhaka city through it's magnitude and severity. Although over the last couple of decades, Bangladesh has accomplished significant progress in many sectors in child development issues including child education, child mortality, and child malnutrition and even on child labor problems. But yet the level of progress has been accomplished in child labor problem that is not as expected as it is supposed to be. To eradicate extreme form of child labor and exploitation, child labor education should be in the national agenda. Unfortunately this issue has not got such priority. From the viewpoint of this research results, it is found that still poverty is the focal cause of child labor growth and subsequently, illiteracy, insufficient opportunities, weak governmental support and policies, lacking of social and citizen initiatives could be blamed for the liability to solve of such problem. The study found that child laborers who are engaged in hazardous of jobs, are generally deprived of education and subsequently suffer from various physical, mental as well as psychological problems due to the work pressure, exploitation, family crisis, illness of family members and other factors which altogether keep them in a psychological prison and create a situation while they feel depression and frustration in their lives. In most of the cases, child laborer do fulltime work and more than that as a result they do not have the chance to get educational opportunity. Therefore most of the children who work fulltime in Dhaka city are deprived of their basic rights of education that ultimately hamper them to grow up with honor and depriving them of any chance to get any dignified job in their lifetime. As having no alternative path, child laborers are the victims of our socioeconomic mechanism and consequently they are force to remain underprivileged.

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Sultana, Rahman & Islam

Teachers' Views Regarding the New Approaches of Primary Science Textbooks: Rural and Urban Perspectives

Mst. Rebeka sultana[a], S M Hafizur Rahman[b] and Md. Serajul Islam[c]

[a] *Research Student, Institute of Education and Research, University of Dhaka*
[b-c] *Professor, Institute of Education and Research, University of Dhaka*

The primary science curriculum of Bangladesh has been revised in the year 2011. To implement the aims and objectives of the curriculum, the primary science textbooks have been developed in a new approach in 2015. In this study teachers' views and perceptions on a total of nine crucial aspects of new textbooks have been investigated. These are: Way of starting a lesson; Exploring prior knowledge; Real-life orientation of science concept; Science process skills; Activity-based class; Collaborative approach; Illustrations and diagrams; Scientific inquiry; and Lesson summary. Convergent Mixed Method Design has been adopted to conduct this study. Descriptive and thematic approach has been used to analyze the data. The participants and their classrooms were selected conveniently. Questionnaires and interviews of the teachers were used as instruments. This study finds that most of the teachers are knowledgeable about exploring prior knowledge, real-life orientation of science concept, activity-based class, collaborative approach, illustrations and diagrams and summary of a lesson. On the other hand, most of the teachers are not informed about the way of starting a lesson, science process skills, and inquiry-based teaching-learning. This study also finds that urban teachers are more knowledgeable than rural teachers about the new approaches of primary science textbooks.

Key words: *Science Textbook, Primary Education, Bangladesh*

Introduction

Curriculum development and education is a continuous process. Curricula need to be reviewed and revised according to the demands of time, socio-economic conditions and culture (NCTB,2012). Curriculum revision refers to inclusion of new content knowledge, instructional method and learning outcome through the change of materials and programmes (Comfort, 1990; King-Sears, 2001). Primary science curriculum of Bangladesh was revised and modified in 2011 on the basis of national education policy 2010. The aims and objectives of primary science curriculum are determined to fulfill the demand of national education policy. To implement the aims and objectives, primary science textbooks were developed in a new approach in 2013. Textbooks are considered as an important element of effective teaching-learning, as they provide learner with "a rich array of new and potentially interesting facts, and open the door to a world of fantastic experience" (Chambliss & Calfee, 1998. p.7). Textbooks are designed to provide a complete grade-level programs that include all contents and materials that teachers will need to teach a given academic subject (Ball &Feiman-Nemser, 1988; Yager, 1996; cited in Lewis, R. A., 2012). In Bangladesh textbooks are considered as principal resource for teaching and learning. Teacher, students, assessor and others do their educational activities

mainly based on textbooks. Textbooks are especially important for teachers who are new, inexperienced or lack adequate time to plan quality science lessons (Roseman et al., 2001; Schwarz et al., 2008; cited in Lewis, R. A., 2012). Students have strong belief in textbooks. Their internal as well as social development depend to some extent on the underlying philosophy of the content and organization of the textbooks. New science textbooks for primary level were tried out in 32 Govt. primary schools of seven divisions of Bangladesh. After piloting, these new approaches were finally selected for primary science textbooks and were implemented in 2015 for grade 3 and in 2016 for grade 4 and 5.

In the new science textbooks, each lesson starts with a real life oriented key question which reflects the main objectives of the lesson. This key question also directs students to do some work to satisfy their motive ignited by the question. Therefore, it is reasonable to expect that while interacting with these books, the students will become active learners rather than merely a passive reader. For example, it provides the scope for the students to participate in investigation, observing, experimenting, inferring and group discussion. An enriched lesson summary is presented at the end of each lesson (NCTB). Although these new approaches focus on student-centered activities, teachers have their definite role in every step of the lesson. Teachers are considered as source of content, organization and instructional activities and ideas for lessons (Johansson, 2006; Reys et al., 2004). Teachers and textbooks are two important components to implement the curriculum. According to Adams (2006), understanding and views of the teacher along with other factors like education are found to be the determining factors in the teachers' decision about classroom strategies. Lotter, Harwood and Bonner (2007) argued that understanding of teachers can be shaped and reformed in many ways and then understanding leads to practice accordingly. According to Funda (2009) many studies including Beck et al.(2000), Haney et al.(1996), Haney and McArthur(2002), Hashweh (1996), Levitt (2002), Roehrig and Kruse(2005) found that teachers' knowledge, understanding, views and beliefs have a significant relationship with classroom practice. It has been depicted in a number of researches that teachers depend on textbooks for their preparation of the lesson, facing new content, practicing, giving assignments (e.g., Pepin & Haggarty, 2001; Johansson, 2006; Glasnović-Gracin, 2011) and also for structure and syllabus for a programme (Crawford cited in Richards & Renandya 2002).

The shift of the approach displayed in the current primary science textbook compared to the former version is remarkable. This change may face some inertia because, beside other factors, most of the teachers are habituated with the previous textbooks. In education system, change is most of the time difficult because a number of constraints arise from inside and outside the system that prevent change to occur. 'Traditions, traditional values and often very strong interests keep education within the confines of old times'. (Jón Torfi Jónasson, European journal of future research, 2016). Textbooks are being mainly implemented in classroom practices by teachers. Therefore, their views about the change is important to analyze the conservativeness regarding new approach of the science textbook. In this research nine key aspects have been identified to investigate teachers' views and perceptions regarding the new textbooks. These are: (1)Way of starting a lesson, (2)Exploring prior knowledge, (3)Real-life orientation of science concept, (4)Science process skills, (5) Activity-based class, (6)Collaborative approach, (7) Illustrations and diagram. (8) Scientific inquiry and (9) Lesson summary. This study also explores the differences among teachers' views considering rural and urban perspectives.

Research Problem

The new approaches of primary science textbooks of Bangladesh have become a matter of debate among policy makers, curriculum experts, teachers and other stakeholders. This study focuses on teachers' views regarding the new approaches in primary science textbook and whether teachers from rural and urban areas of Bangladesh have different perception about this approach. Based on a study on the schools in Western Australia, Young reported that there exists difference between urban and rural schools regarding the resources and other factors such as teachers' training, quality of instruction and schooling conditions (Young, School Effectiveness and School Improvement , An International Journal of Research, Policy and Practice, Volume 9, 1998 - Issue 4). Other researchers also reported a number of observations on the rural and urban education of a number of countries. [(Saadia Tayyaba of Department of Experimental Psychology, University of Oxford, Oxford, UK) Alspaugh, 1992; Edington and Martellaro, 1984; Fan and Chen, 1999; Howely and Gunn, 2003, Lee and Mclntire, 2000; Monk and Haller, 1986; Randhawa and Hunt, 1987)]. However, to the best of our knowledge no systematic research has been done to address teachers' views regarding the new approaches in primary science textbook introduced by the National Curriculum and Textbook Board of Bangladesh. Teachers are the most important part of the education system. Therefore, it is necessary to explore the teachers' views considering the rural and urban perspectives of new approaches of textbooks. This kind of study will help the primary science teachers and future educationists to find out the inertia to inculcate the new ideas in classroom practices and make their teaching effective and curriculum specialists for further development of this area.

Research Questions

Answer to the following questions were explored through this study-
1. What are the teachers' views regarding the new approaches used in primary science textbook?
2. How do their views and perceptions differ from rural to urban perspectives?

Theoretical framework

Characteristics of Science Textbook

The textbook is used as a standard source of information for formal study of a subject and an instrument for teaching and learning (Graves 2000). Altbach and Kelly (in St. George, 2001) stated that 'textbooks contribute the base of school knowledge in 3rd world countries'. Frey and Fisher (2007) defined textbooks as compendiums of curriculum resources and materials for teachers and students. Elsewhere in the world special attention is paid to develop textbook for the young people. The Korean primary science textbooks have been developed following the 'FLOW' model that includes four stages (Yang, I.C., L.D., S.K., Kim, & Lim Jaekeun, 2012).Japanese curriculum is revised in every 10 years (Gardner, 2000). The aim for these revisions is to involve students with a 'zest for living' rather than in terms of the quality of knowledge acquired. In Japanese science textbooks each lesson starts with a key question. Emphasis is given on developing scientific views and thinking through scientific inquiry taking place in an activity-based class. The students are engaged collaboratively and they are expected to use their prior knowledge (Sumida, 2005).

Key approaches of new primary science textbooks
The newly developed primary science textbooks of Bangladesh differ from the earlier version in a number of ways. Among those nine key characteristic features have been elucidated in this research. These are-Way of starting a lesson; Exploring prior knowledge; Real-life orientation of science concept; Science process skills; Activity-based class; Collaborative approach; Illustrations and diagram; Scientific inquiry; and Lesson summary.

Methodology
Considering the purpose of the study, convergent mixed methods design was followed. It may render the possibility of building on the synergy and strength that exists between quantitative and qualitative research to understand a phenomenon more fully than was possible using either quantitative or qualitative methods alone (Gay, Mills, & Airasian, 2012). Hence, qualitative and quantitative data were collected and by merging those data result was found to understand the research problem (Creswell, 2012). The sources of data of this study are 15 rural and 15 urban primary science teachers. The research design of this study were as follows:

Administering questionnaires (among 15 rural and 15 urban teachers') to collect both quantitative and qualitative data to explore teachers' views
Then, 2 rural and 2 urban participant teachers were interviewed to cross check the above data. The interview schedule is also semi-structured.
Compared rural to urban perspectives to find the differences among their views and perceptions.

The sample and sampling of this study were as follows:

Table-1: Sample and sampling of the study

Activity	Sample	Sampling	Source of data
Questionnaire	15 rural and 15 urban (total 30) primary science teachers.	Convenient sampling.	30 primary science teachers.
Interview	2 rural and 2 urban (total 4) primary science teachers.		4 primary science teachers

We used questionnaires (containing both closed ended and open-ended questions) and semi-structured interview schedule as data collection tools to conduct this study. The quantitative data from the questionnaire were analyzed using simple descriptive statistics-frequency distribution and calculation of percentage. The qualitative data from questionnaire were quantified. Descriptive statistics was employed with the aim to understand teachers' views regarding the implementation of the new approaches used in textbooks. Thematic data analysis was conducted for interview schedule for qualitative data by following 9 key approaches of textbooks. Each approach was considered as a theme. The thematic analysis was followed to determine the differences among teachers' views with emphasis on rural to urban perspectives. We developed the tools according to the literature review. The opinion from a member of NCTB-researchers was useful for conducting the research. After piloting and getting experts' opinion, necessary changes were made on the questionnaire.

Result

This section looks at the results of teachers' views and the differences among their views from rural to urban perspectives. Key aspects of the primary science textbooks have been explored through qualitative and quantitative data. Information from rural and urban background have been treated symmetrically.

Teachers' views regarding the new approaches of primary science textbook

Table-2 presents whether teachers are knowledgeable or not about the new approaches used in primary science textbooks. Data reflects that teachers have knowledge about exploring prior knowledge, real-life orientation of science concepts, activity-based class, collaborative approach and illustrations (pictures and diagrams) used in new primary science textbooks. On the other hand, in some cases they do not have sufficient knowledge such as: way of starting a lesson, science process skills, scientific inquiry and lesson summary.

Table-2: Teachers' knowledge about the new approaches

Approaches	Knowledgeable		Not knowledgeable	
	Rural, N=15	Urban, N=15	Rural, N=15	Urban, N=15
Way of starting a lesson	4	4	11	11
Exploring prior knowledge	15	15	0	0
Real life orientation of science concepts	15	15	0	0
Science process skills	6	8	9	7
Activity based class	15	15	0	0
Collaborative approach	14	15	1	0
Illustrations (pictures and diagrams)	15	15	0	0
Scientific inquiry	5	7	10	8
Lesson summary	9	9	6	6

The participant teachers were also asked about their views on the scope of the key approaches in science textbooks. They were provided with five-point Likert type scale which was then categorized into three-point scales.

Table-3: Teachers' views on the scope of the nine key approaches in science textbooks

Approaches	Well		Partial		Hardly	
	Rural N=15	Urban N=15	Rural N=15	Urban N=15	Rural N=15	Urban N=15
Starting a lesson with a Key Question	4	4	0	0	11	11
Exploring prior knowledge	10	10	4	5	1	0
Real life orientation of science concepts	15	12	0	3	0	0
Science process skills	9	9	5	5	1	1
Activity based class	15	15	0	0	0	0
Collaborative approach	10	9	2	5	3	1
Illustrations (pictures and diagrams)	15	15	0	0	0	0
Scientific inquiry	5	5	0	2	10	8
Lesson summary	8	7	1	0	6	8

Table-3 shows that in most of the cases teachers were knowledgeable about the scope provided to support the key approaches of new textbooks. Teachers were also asked to mention an example in favor of their answer to clarify whether they were familiar with the new approaches of the textbooks or not.

Their response about this clarification has been presented in Table-4, which reflects that all the teachers, either from rural or urban area, are capable of giving examples for exploring prior knowledge, real-life orientation of science concepts, activity based class, illustrations and lesson summary.

Table-4: Ability of mentioning relevant examples

Approaches	Successful		Unsuccessful	
	RuralN =15	UrbanN=1 5	RuralN= 15	UrbanN =15
Starting a lesson with a Key Question	4	4	11	11
Exploring prior knowledge	15	15	0	0
Real life orientation of science concepts	15	15	0	0
Science process skills	6	8	9	7
Activity based class	15	15	0	0
Collaborative approach	10	12	5	3
Illustrations (pictures and diagrams)	15	15	0	0
Scientific inquiry	5	7	10	8
Lesson summary	15	15	0	0

It is also to be noted here that for some approaches, for example in the cases of starting a lesson with a key question, science process skills and scientific inquiry, most of the participant teachers were not able to mention relevant examples.

Effectiveness and importance of the new approaches
Almost all of the participant teachers claimed that the new approaches are important for effective science teaching and learning. Table-5 represents their responses in this regard.

Table-5: Reasons behind the effectiveness and importance of the new approaches

Approaches	Reasons behind its importance
Way of starting a lesson	Students become curious and interested to seek the answer of the key question.
Exploring prior knowledge	To construct new ideas on the basis of what they already know and how much to know. The learning becomes effective and sustainable when new ideas are linked with their (students') what they know about the concept.
Real life orientation of science concepts	To make the concept easy to understand, ensure effective and sustainable learning and make the learner interested and curious about the concept.
Science process skills	To make students able to observe, measure, identify, classify, experiment.
Activity based class	To make learner attentive and active.

Collaborative approach	To make the lesson enjoyable, make them interested in active participation, promote students collaborative attitude and their creative thinking.
Illustrations (pictures and diagrams)	Easy to make interested and understand the topic to the students as well as teach the complex and abstract ideas easily.
Scientific inquiry	To encourage students to identify a problem, collect data, analysis data and then make a conclusion.
Lesson summary	To make students interested to find out the answer by investigating.

Differences among teachers' views- Rural to Urban perspectives

An important concern of this study was to explore whether teachers from rural and urban area possesses different views about the change incorporated in the new science textbook.Table-6 shows the differences among rural and urban participant teachers' views.

Table-6: Rural and urban views regarding the approaches

Approaches	Knowledgeable(N= 15)		Not knowledgeable (N=15)	
	Rural	Urban	Rural	Urban
Way of starting a lesson	4	4	11	11
Exploring prior knowledge	15	15	0	0
Real life orientation of science concepts	15	15	0	0
Science process skills	6	8	9	7
Activity based class	15	15	0	0
Collaborative approach	14	15	1	0
Illustrations (pictures and diagrams)	15	15	0	0
Scientific inquiry	5	7	10	8
Lesson summary	9	9	6	6

Data show that there is no noteworthy difference in their views regarding way of starting a lesson, exploring prior knowledge, real-life orientation of science concepts, activity-based class, illustrations and lesson summary considering rural to urban perspectives. On the other hand, a little difference is observed in their views about science process skills, collaborative approaches and scientific inquiry. In these cases, data indicate that urban participant teachers are more knowledgeable than rural participant teachers.

Discussions

Teachers' views

Way of starting a lesson: This study finds that majority (22 out of 30) of the participant teachers are not concerned that each lesson starts with a key question in new textbooks. They mentioned that a lesson of new textbook starts with description, pictures, activity etc.Only26.7% (8 out of 30)of the participant teachers are well-concerned that each lesson in new textbook starts with a key question. This finding is not consistent with the major refinements in the new primary science textbooks that each lesson starts with a key question (NCTB, 2017).

Exploring prior knowledge: This study reveals that almost all (29 out of 30) teachers have acknowledged the importance of the students' prior knowledge. They have claimed that prior knowledge plays important role as a base of students learning; it helps teachers to identify what students already know. The learning becomes effective and sustainable when

new ideas are linked with prior knowledge of the students. This is consistent with Fensham's (1985, cited in Siddique 2007) suggestion for a 'Science for All' curriculum in that teaching of science content is expected to 'begin as an extension of what the learners already know from their experience prior to schooling'. The teachers' views reflected by the data are also aligned with Robert Marzano's (2004) and Schallert's (2002) observation that exploring one's prior knowledge can guide teachers to design appropriate teaching strategies, assist students to connect past experiences and new incoming information, consequently enhance effective learning and it is the strongest indicator of how well they will learn new information relative to the content (cited in ReLeah Cossett Lent 2012). Result of this study suggests that two-third participant teachers have acknowledged that there are adequate scopes in new textbooks to explore students' prior knowledge which is consistent with the major refinements in the new textbooks. According to primary science textbooks 2017, enquiring of pupils' prior knowledge and experiences were tried to address in the lesson.

Real-life orientation of science concepts: Manabu (2004) suggested that science lessons should be related to children's experiences in the environment and daily life. We found clearly that real life phenomena, examples have been depicted in almost all of the lessons in the new textbooks. It is also described in the preface of the new textbooks that each lesson is presented through linking with real-life experiences (NCTB, 2017). In this study we observed that all of the participant teachers claimed that linking real-life situation with science concepts is very important for science teaching-learning. All of them have mentioned that new textbooks provide scope for exploring prior knowledge.

Science process skills: Helgeson (1992) mentioned that the most effective approach in teaching science is to integrate science process skills and science content using hands-on activities which focus on specific problem solving skills. Therefore, it is important that teachers should be knowledgeable about the science process skills and able to create the proper environment for students to achieve these skills. This study shows that all the participant teachers' confirmed the importance of achieving science process skills. We found in this study that only less than half (14 out of 30) of the participant teachers were well knowledgeable about science process skills. They explained that these skills make students able to observe, measure, identify, classify and experiment.

Activity-based class: Lakshmi (2005) asserted that activity-based teaching-learning is learner-centered and it encourages self-learning; it also allows the learner to study according to his / her own ability and skills. This study finds that all participant teachers agreed to make teaching-learning more effective it requires activity-based class.

Collaborative approach: Wismath & Orr (2004) suggested that collaborative approach is essential to develop students 21st Century' Skills and it is considered as an essential tool to cope with the complex problem (Griffin et al. 2015). In new textbooks, two characters have been introduced as a part of collaborative approach. There have also been designed a number of group works to foster communication skills, expression ability and positive attitude of the learners. This study finds that almost all the participant teachers were well-concerned about the importance of collaborative approach for science teaching-learning. It also reveals that the majority (23 out of 30) of participant teachers think that the new textbooks contain sufficient information about collaborative approach. The majority (22 out of 30) of participant teachers accurately identified the reflection of collaborative approach in textbook.

Illustrations (pictures or diagrams): This study shows that all the participant teachers were well-concerned about the importance of using illustrations for science teaching-learning as well as its relevancy with content in textbooks. They claimed that illustrations make the topic easy to understand; make the students interested; help to learn the complex and abstract ideas easily. These findings are consistent with Bishop's (1989) views that proper and relevant illustrations such as pictures or diagrams play a strong role as a tool for students learning and it helps students to understand the concepts and make them interested. And also by using appropriate diagrams students can interact properly on concepts (Thomas & Yoon Hong, 2001).

Scientific inquiry: It is found from this study that a considerable number (12 out of 30) of participant teachers had the views about scientific inquiry that refers to make a decision through observation, hypothesis and experiment; scientific inquiry means to identify a problem, collect data, analyze data and then make a conclusion. This finding is consistent with Venville & Dawson's (2004) views that scientific inquiry refers to the combining of traditional science processes with scientific knowledge, scientific reasoning and critical thinking to develop scientific knowledge as well as the development of science process skills.

Lesson summary: Haystead & Marzano (2009) asserted that lesson summary helps to increase students' understanding of content. This study reveals that more than half (18 out of 30) of the participant teachers claimed that the lesson summary provided in new textbooks is sufficient for science teaching-learning. Analyzing the new primary science textbooks, it is found that lesson summary has been provided in each lesson in new textbooks. It is also clearly stated at the beginning of primary science textbooks that each lesson is presented through grade fitting simple texts and child friendly summary.

Differences among teachers' views- Rural and urban perspectives

There is no noteworthy difference in the participant teachers' views considering rural or urban perspectives. Teachers both from rural and urban hold almost similar views about the way of starting a lesson, exploring prior knowledge, real-life orientation of science concepts, activity-based class, illustrations and lesson summary considering rural or urban perspectives. However, we observed a little difference in their views about science process skills, collaborative approaches and scientific inquiry. This study finds that 6(out of 15) and 8(out of 15) participant teachers respectively from rural and urban are concerned about the importance of science process skills. This study also finds that 5 (out of 15) rural and 7 (out of 15) urban participant teachers are knowledgeable about the inquiry-based teaching-learning. This study reveals that 10 (out of 15) rural and 12 (out of 15) urban participant teachers are concerned about the collaborative approach. Therefore, it is evident from this study that urban participant teachers are more knowledgeable than rural participant teachers. These findings are consistent with the study of Singh (2010) where they stated that teachers' perception can vary from rural to urban perspectives according to the use of textbooks provided instructional materials in the classroom.

Implications

The findings of the study can be implicated in teachers' practice, teachers' training, textbooks writers, curriculum development, school authority etc. The following are the major implications of findings of this study.

- It is evident from this study that most of the participant teachers are not well-concerned about inquiry approach used in the new textbook. They hardly know how to conduct an inquiry-based science lesson. There is no instruction in curriculum about the inquiry-based lesson. Curriculum developers may expand

their thinking on this issue. They may prescribe the features of an inquiry-based lesson.

- This study finds that teachers have no training regarding the new approaches of primary science textbooks. Besides, because of their personal belief system they do not use these approaches. Teachers' professional development training and motivational programmes may address the above issues.
- This study reveals that learning outcomes are not mentioned in the textbooks. Participant teachers also suggested to add learning outcomes before starting a lesson. Textbooks writers may consider this finding and may include learning outcomes in textbooks.
- This study has been conducted on a small scale. Future research can be done on a large scale to find out the teachers' views and perceptions considering both rural and urban perspectives about the new approaches of primary science textbooks.

Conclusion

In this study, teachers' views and differences considering rural and urban perspectives have been explored. It has also given us a scope to understand the existing status of the characteristics of a lesson for science at primary level in Bangladesh as well as international context. Initially we had no idea about teachers' views regarding the new approaches of primary science textbooks. This study explores teachers' views and the differences about rural and urban perspectives regarding the new approaches used in primary science textbooks. It has given us an insight into this. This study provided us an opportunity to know how a lesson should be organized at the primary level. After conducting this study, we come to know that there are differences between rural and urban perspectives. This study has given us an insight that the features of inquiry-based teaching may be introduced in curriculum or textbooks for teachers' better understanding on this.

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