

Online Education and Community Participation in Bangladesh: Challenges and Opportunities to Ensure Inclusive Learning During COVID-19 School Closure

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Abstract

Like most other countries around the world, after the emergence of the COVID-19 pandemic, Bangladesh's education system has undergone a radical change from the beginning of March 2020 onwards. The study attempts to analyse teachers', students' and parents' perceptions and experiences about the online education in the COVID-19 pandemic at the school level. To fulfil the research objectives, the study selects some private schools (kindergarten to high school) in the Chattogram District of Bangladesh. The study strongly advocates for making the online classes more effective and inclusive for all. There is a need to bring a strategic change from the course curriculum to the teaching process and ensure an amalgamation of all types of interventions (online and offline classes) for online learning activities through a unified policy direction.

Introduction

The worldwide pandemic COVID-19 has surged the largest breakage of education systems in history which affected 1.58 billion children and young learners, from pre-primary to higher education, in 200 countries (United Nations, 2020). The immediate terminations of classes in every school and other distinguished learning spaces have thrashed the learning processes of 94% of the world's student population eventually affecting 99% of them in low and lower-middle-income countries (United Nations, 2020). Another study of UNICEF (2020) shows that for at least 463 million children, whose schools were closed due to COVID-19 did not get proper access to remote learning. 31% of school children worldwide could not be reached through remote learning programmes,

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mainly due to a lack of necessary household assets or policies pitched towards their needs (UNICEF, 2020). Research has shown that although there are plenty of plans to initiate online learning programmes during the pandemic, these are mostly concentrated on small cases and not on a global crisis as it is happening now with the COVID-19 situation, especially, in the countries which are not well-equipped with technological facilities (Sintema, 2020).

Countries across the globe have introduced manifold solutions during the pandemic in continuation of the education process. Telecasting educational TV shows, online libraries providing resources, video conferencing and online channels were introduced in 96 countries (Basilaia & Kvavadze, 2020). More than half of the children aged 5–17 who are attending schools are deprived of internet access in countries such as Bangladesh, Lesotho, Madagascar, Mongolia, Pakistan (Punjab), Sierra Leone, Togo, Tunisia and Zimbabwe (UNICEF, 2020). The Government of Bangladesh declared closures of all sorts of educational institutions from 17 March 2020 due to the malicious effects of the coronavirus (BRAC, 2020). In Bangladesh, there are 38.6 million students, among whom 3.6 million students are in pre-primary, 18 million in primary, 13 million in secondary and 4 million in tertiary education (BANBEIS, 2018). The government commenced distant learning initiatives through Sangsad TV to continue the pace of learning for students during the lockdown (UNDP, 2020). Initially, it was for the students of Class 6–10 and gradually extended to primary schools and *Madrassas*. Alternative mechanisms were also introduced in some of the English-medium schools in urban areas such as online classes through video conferencing apps (BRAC, 2020).

However, it has been assumed that community participation in any development interventions ensures an effective and sustainable output for society. During a pandemic situation, community peoples' participation in education might bring a positive outcome and students from different vulnerable positions will be connected with the education system through community-level initiatives such as School Management Committees (SMCs), different social volunteer groups and parents' informal groups (UNDP, 2020). Several studies showed that the quality of education has improved in schools due to these community-based participation programmes and policies (Heneveld & Craig, 1996). Kendall's (2007) study argued that the programmes and policies that are designed to increase parental and community participation in online education have a concentration on creating a formal platform by which parents can play an active and regularised role in their children's education. Considering the present scenario of online education and the importance of community participation, the main purpose of this study is to critically analyse teacher–student perception and performance about online classes, especially at the school level in Bangladesh.

By examining the ongoing online learning system, this research attempts to analyse the importance and scope of community participation such as parents' groups and social volunteer groups in building resilience and inclusive learning processes during a pandemic crisis like COVID-19.

Literature Review

Bangladesh's ICT-Based Education Landscape and Performance in the Pandemic

In Bangladesh, there are 188 teacher education institutions (both government and non-governmental) located, including the Primary Training Institute, Teacher Training College, Higher Secondary Teacher Training Institute and Madrasah Education Institute for Teachers (BANBEIS, 2018). According to the A2i Programme (2018), in the secondary levels of education, the Government of Bangladesh decided to establish an Information and Communication Technology (ICT) system. There are 23,331 and 15,000 multimedia classrooms in primary and secondary schools in Bangladesh. Over 180,000 teachers and 1,650 master trainers have earned training in the development of multimedia content. However, because the schools are closed during the lockdown period, these services could not be used to take online courses. Due to the digital divide in urban and rural areas in a developing country like Bangladesh, taking online classes for primary and secondary education is not that easy (Farhana et al., 2020). Moreover, besides ensuring access to ICTs and technological infrastructure, the ongoing coronavirus crisis accentuates the need for change in the method of teaching and course curriculum at educational institutions (Khatun, 2020). In this regard, from the policy-level interventions, there must be an inclusive and strategic approach that will contextualise the traditional education system through proper renovations (Khatun, 2020). Data also showed that 92% of Bangladeshi citizens use mobile networks to use the internet (BTRC, 2020), but internet speed varies widely from urban to rural areas (Sohail, 2020). Internet prices and minimum required gadgets for participating in online classes are also beyond the scope of most Bangladeshi students in rural and remote areas (Khatun, 2020).

Despite having a lack of robust infrastructural and strategic policy support, the Government of Bangladesh launched different initiatives to start online education for the school-going students. In a study of UNDP (2020), it was found that in collaboration with the Directorate of Primary Education, the Department of Madrasah Education, the Directorate of Secondary & Higher Education, and the Directorate of Technical Education, and with financial support from UNICEF, A2i has been broadcasting over 100 digital contents for primary school

students through Ghore Boshe Ghore Shikhi, a total of 640 content for secondary-level students through Amar Ghore Amar School.

Teacher–Student Perceptions and Challenges in Online Learning

Undoubtedly, online education, during this pandemic situation opens up a new horizon of opportunity but also generates another form of challenges for the developing and underdeveloped countries across the world (Shearer et al., 2020). In that context, online education, or distance learning, during the pandemic situations must be considered in the light of the existing policy support, institutional capacities, and stakeholders' expectations across the country. The school curriculum should be increasingly interwoven with ICT, and opportunities should be given to students to use advanced technical equipment and digital tools for innovative and creative purposes (Kozma, 2011; Shearer et al., 2020). However, study depicts that online learning provides both teachers and students a more flexible and convenient learning environment through customising the learning methods (Wei & Chou, 2020). Furthermore, through synchronous communication processes, online learning improves the quality and quantity of interaction among students, teachers and learning peers (Wei & Chou, 2020). In another perspective, Petrides' (2002) research showed respondents indicated several obstacles in online classes such as students felt a lack of spontaneity in responses in the online setting compared with what could normally occur in a formal face-to-face class discussion. Study also shows that, despite having various incentive packages of telecommunication companies, in developed counties like the USA, Philadelphia's school district had to face various challenges to ensure equity in the online learning (Morgan, 2020). Same study also depicts access to internet does not always guarantee that all students will be benefit by equitable services, as adolescences from low-income households are more likely to be without a computer at home (Morgan, 2020). Even in 2017, 14% of US children aged 6–17 years lived at home without internet access (Goldberg, 2018).

So, it could be depicted that the satisfaction of online learning is a multidimensional construct and is influenced by many factors such as availability of devices, smooth internet facility, scope of interaction with instructors or peers and overall learning readiness for online education. Certainly, such experiences are varied from region to region around the world.

Participatory Teaching and Community Involvement in the Online Learning

Different empirical studies and evidence suggest community-engaged pedagogies are as effective in online-based teaching as in traditional face-to-face delivery in

the classroom (Purcell, 2017). In that context, during the pandemic crisis, communities could build and strengthen resilience in the abrupt shutdown of the formal education system through utilising various potential opportunities of community people like social networking, and availability of information along with the distance learning of local schools (Holmes, 2020). It has been noted that the attitude towards participatory learning at the school level will be more effective if networking of community people and parents' groups are properly blended with the existing online resources of local schools (Holmes, 2020). The study of Chatterjee and Correia (2020) also depicts that education equated with the attitude of the students towards using online resources such as discussion boards, blogs, wikis, and others also ensure effective learning for the learners in the collaborative learning process. Many of the programmes and policies aimed at improving the growth of parents, and community engagement has concentrated on developing structured frameworks (such as school committees or groups of parents–teachers) in which parents may play active and participatory roles through delegating some powers in the decision-making process of the schools (Kendall, 2007). In that way, an effective engagement can be maintained between parents and different community groups during a critical situation like the COVID-19 pandemic. As a consequence of these initiatives and policies of community participation, a variety of studies have claimed that school quality has increased over time (Heneveld & Craig, 1996).

Statement of the Problem

Globally, many studies (Basilaia & Kvavadze, 2020; Daniel, 2020; Dhawan, 2020; König et al., 2020; Morgan, 2020; Murphy, 2020; Wei & Chou, 2020; & Yang, 2020) have been conducted regarding the observations and processes of distance learning or online education during the COVID-19 pandemic. However, it has been observed that due to the complete shutdown, schools across the world faced a big challenge to keep the students academically active. In case of Bangladesh, all schools have been experiencing and going through such a critical situation. Although the government of Bangladesh has taken several measures to incorporate students in online classes through Sangsad TV and community radio, in reality, a huge number of the students persist out of reach. Because of a digital divide both in urban and rural areas, financial incapability and lack of infrastructural support such as smartphones and uninterrupted internet facility, it has become a great challenge to ensure inclusive education in the COVID-19 pandemic. Even the schools, which have already started online classes are not capable to reach every student with the virtual learning activities effectively. As a result, this unprecedented situation of the pandemic has left many students

physically and mentally nuanced and their families are also financially burdened to afford the extra cost of technological gadgets. So, to ensure an effective learning process and building resilience, there is no alternative to policy-level paradigm shift in the education sector. Such a transformation must be brought not only in the course curriculum, class method or student assessment process, but there must also be an attempt of community participation to make the online learning effective and meaningful for the students

Research Objectives

The objectives of this study are as follows:

- To evaluate teachers' and students' perceptions about online education methods.
- To find out best practices of community participation for effective online education.
- To propose an integrated framework of online education to ensure inclusive learning in the pandemic.

Conceptual Framework

Social distancing and school closures certainly pushed school-going students into an academically vulnerable situation. Sometimes, such situations have become more intense due to a lack of access to ICT and the digital divide both in underdeveloped and developing countries. Moreover, different studies also show that students who even get access to ICTs like internet, mobile phones, TV or laptop facilities, do not often participate in the distance learning due to lack of proper supervision and monitoring systems at the household level. In these circumstances, considering various constraints of online education, active community participation along with the virtual learning system might be an effective and sustainable way to incorporate students with the learning process in the long run. It is also expected that resilience build-up might be possible if community, especially parents and different social volunteer groups are promptly monitoring students' performance and communicating with the concerned school teachers.

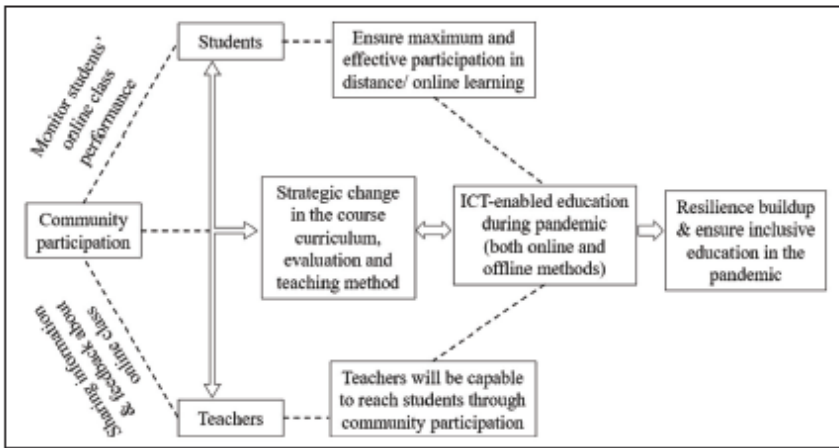


Figure 1. Conceptual Framework.

Source: The authors.

Eventually, to cope up with the new normal, obvious strategic measures have to be adopted from the policy level to bring change in the course curriculum and traditional teaching methods.

Research Methodology

The study was carried out in the Chittagong District (officially known as Chattogram), the south-eastern part of Bangladesh, during October and November 2020, at which time schools were completely shut down due to the COVID-19 pandemic. Privately governed kindergarten to high school level (up to class 10), both in the City and Pouroshava areas, were selected for this study. The research is mostly qualitative and descriptive one with mixed methods of data analysis. The purposive sampling technique was used to collect all required information from targeted students, teachers and parents. A questionnaire survey, consisting of sixty students was carried out to have an understanding of online class activities and students' performance. As a part of the key informant inter- view, both teachers' and parents' opinions were also collected to learn about students' online class performance, barriers and opportunities. Besides this, to have a holistic perception of community people, the study also conducted a Focused Group Discussion (FGD) session in the study area. Three separate Google Docs questionnaire forms with open- and closed-ended options were designed to collect the necessary information. Sometimes, based on the situation and availability of students, information was also collected visiting students' homes. Both primary and secondary data were utilised to conduct this research.

Major sources of data were collected from books, journal papers, reports and websites.

Data Analysis and Discussion

Online education during the COVID-19

Understanding teachers' and students' perceptions was our objective.

Learning and Teaching Method for the Online Class

The study found that in the pandemic, schools conducted their online activities in various ways. Some schools took online classes, whereas others conducted both online and offline classes simultaneously. While asked about the methods of online learning in the schools to ensure effective learning experiences from respective teachers and students, the ratio of online-based class method was higher, consisting of 56.66% responses from teachers and 35% responses from students. Besides the online activity, some schools provided supportive hand notes for the convenience of their students. Figure 2 shows 40% of teachers and 21.67% of students participated in the learning and teaching method in this process.

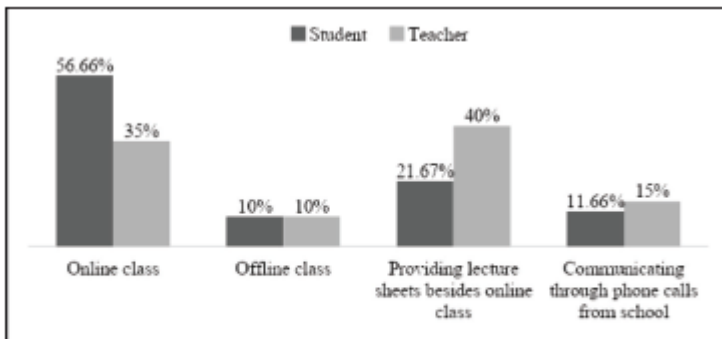


Figure 2. Learning and Teaching Method.

Source: The authors (data collected from the field and analysed for presentation).

State of Using Devices and Internet for the Online Class

The study shows that both students, teachers and parents use different types of devices such as smartphone, laptop, desktop and tab for conducting and attending online classes. Differences were also found in the case of internet use. Both Wi-Fi connection and mobile data were used by the respondents. In case of the user device and the internet, it has been found that 81.67% and 68.33% of the students use their device and internet connection. The rest of the students confirm their access to others' (relatives', neighbours') devices and internet facility. Data also show that to conduct and attend online classes, students, teachers and parents

avail highest access to smartphones (93.84%, 55% and 85.54%, respectively; see Figure 3). Whereas availability of laptop and tab was relatively low.

In the questionnaire survey, it depicts that 18.33% and 31.67% of students have no access to their family device and internet for the online classes, and they had to rely on their relatives and neighbours. That is why, sometimes, they miss their classes and rely on Sangsad TV programmes. One of the parents in the Focus Group Discussion (FGD) session shared his experience saying:

I don't have any Smartphone and internet facility of my own. During class time, my children get access to one of my relative's mobile phones. I make my children watch

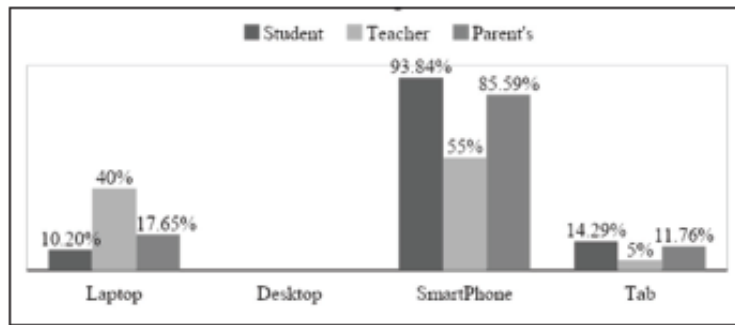


Figure 3. State of Using the Devices.

Source: The authors (data collected from the field and analysed for presentation).

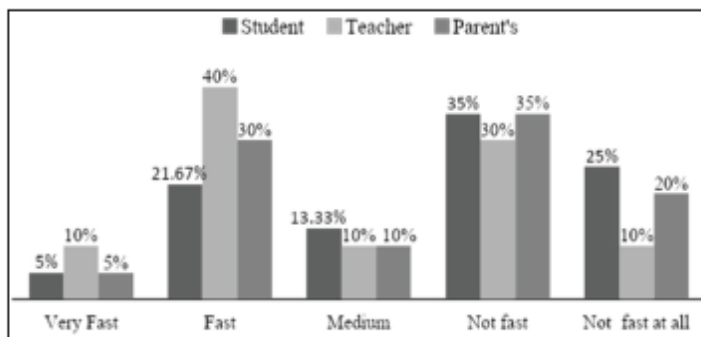


Figure 4. Speed of Internet Connection.

Source: The authors (data collected from the field and analysed for presentation).

Sangsad TV programmes. Every week I call the teachers and seek necessary guidelines. Sometimes I go to the school to collect the class notes and submit assignments for my child.

However, for distance learning, a smooth and uninterrupted internet connection is another precondition. In the study, respondents stated their experiences about the speed status of the internet. Respondents used both mobile and Wi-Fi data for the online class. In the questionnaire survey, it shows that 65% and 35% of the students got access to mobile data and Wi-Fi facilities. Figure 4 depicts that 21.67% students, 40% teachers and 30% parents enjoyed a fast internet system. However, a good number of the respondents, 30–35%, said the existing internet condition was ‘not fast’, and the status of ‘not fast at all’ is also worth mentioning.

Respondents who didn’t enjoy a good internet connection said that in most cases net become slow, and sometimes disconnected. Once it gets disconnected, it would become difficult to get connected again. One of the students of Class 8, described his opinion by saying:

The day I have class, my father would leave his phone at home. But in most cases I found the poor internet speed; as a result, I can’t hear my teachers properly. My father couldn’t afford to have costly data packages. Few of my friends are also experiencing it.

The Necessity of Sangsad TV and Community Radio Programme

During the pandemic, the government decided to broadcast offline classes on the Sangsad television for both school and college students. The main purpose behind this was to attach students with the learning process and tackle student’s dropout. However, it showed that due to proper guidance and monitoring from the schools and parents, such initiatives became less familiar among the students. In the sharing of FGD, the perception of students regarding gaining education through Sangsad TV and community radio seemed a very low priority. Although, at the beginning, the students were instructed to watch Sangsad TV at home, but because of the starting of online classes, a detachment with Sangsad TV and community radio was created, and later they didn’t pay any heed to it because of the lack of guidelines from the school. Moreover, alongside Sangsad Television, different radio stations and Bangladesh Betar broadcasted classes for primary school students. But in the study, no students were found who had listened to the radio programme. However, in the survey, it showed 56.67% of students were not watching Sangsad TV. Despite that, Figure 5 shows 55% teachers, 46.67% students and 25% parents were in favour of TV programmes. Whereas 85% teachers, 45% students and 60% parents were in favour of community radio

programmes, and respectively acknowledged 'effective' for those who were not able to access in online class (see Figure 6).

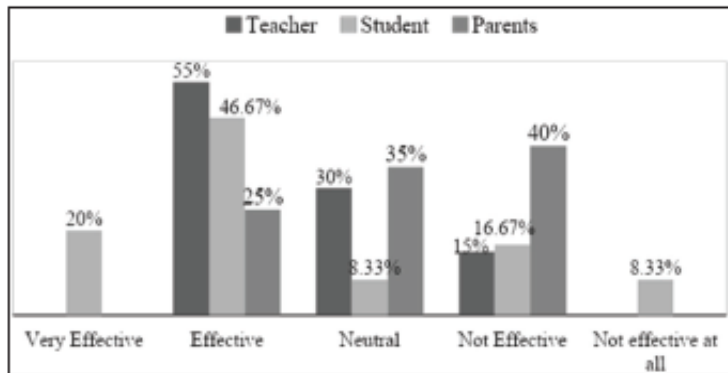


Figure 5. Effectiveness of Implementing Sangsad TV Programme.

Source: The authors (data collected from the field and analysed for presentation).

So, it's tangible that merely broadcasting of the Sangsad TV and community radio will not be an effective measure, until there is no regular monitoring and surveillance from the schools and government. However, in response to a question, 66.67% of students stated they were not getting any specific guidelines regarding this matter from the school authority. While sharing about the importance of Sangsad TV in the FGD session, one of the students of Class 6, shared his experience in the following way: 'The courses on the Sangsad TV are dissimilar to my school's class lecture. So, I don't get enough motivation to watch it regularly.'

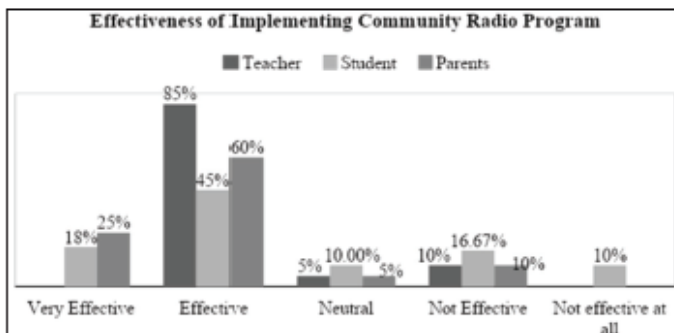


Figure 6. Effectiveness of Implementing Community Radio.

Source: The authors (data collected from the field and analysed for presentation).

Moreover, my parents and teachers didn't give any specific instructions regarding Sangsad TV programmes. Consequently, we lost track for regular watching'. Despite having less popularity of Sangsad TV and community radio, parents argued that in a pandemic situation, there must be a unified course curriculum that would be linked with the content of TV/radio programmes and schools' online classes. Respondents also said that to make such programmes effective, there must be an inclusive policy guideline from the government, and schools' online classes must be conducted followed by such unified guideline

Overall Effectiveness of Online Learning

To cope up with the new learning method was another crucial matter for both students and parents. In most cases, it was found that the installation and proper operation of mobile apps, spontaneous participation in the online classes were considered as major barriers of the online class. One of the parents stated.

In the beginning, I was not familiar with zoom applications but later one of my neighbours helped me. However, in the absence of mine; and due to the lack of technological knowledge of my wife, if there occurred any difficulties, my children couldn't attend the classes regularly and smoothly.

Participation in the online class was another challenge for the students. In the questionnaire, it was found that 53.33% of students did not get a chance to solve questions in the online class. A total of 16.67% of the students said that they could not solve questions, whereas 30% of students were neutral. Regarding class participation, one of the students of Class 8 shared his experience by saying: 'If I don't understand anything in the online class, then it was hard for me to ask a question from the teacher. I would rather seek help for Maths and Science from one of my neighbours and senior school mates living nearby my residence.'

Based on the class attendance, access to online classes, the scope of participation in the virtual class, availability of internet facility, both teacher and students, and parents were asked about the effectiveness of online classes. Figure 7 shows that 21.67% students, 40% teachers and 30% parents believed that it was 'effective'. Whereas, considering every possible opportunity of the online classes, 30–35% respondents thought it was 'not effective'.

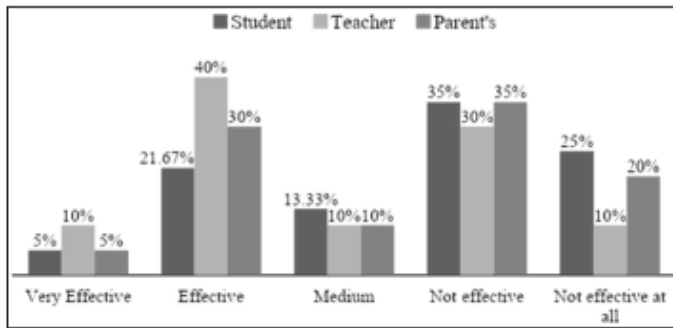


Figure 7. Effectiveness of Online Learning.

Source: The authors (data collected from the field and analysed for presentation).

However, from the perspective of overall online class performance, it can be argued that the education system was tremendously hampered in the pandemic period. The normal flow of study and daily routine of the students was disrupted. Even when the schools started online classes, the presence gradually decreased; and it has turned into less than one-third of the total students of a class.

Community Participation and Online Education: Promote an Inclusive Learning

As educational institutions remained closed because of COVID-19 pandemic, there was no alternative to virtual class until the situation got normal. However, ensuring equal access to ICT has been considered a big challenge for Bangladesh. Digital divide, financial incapability and reluctance towards virtual class have been considered as major constraints towards ensuring effective online class in the schools. In this context, to minimise the loopholes of equal access to ICT, community participation could be an effective mechanism. In the study, teachers, parents and local representatives were asked about the importance and practices of community participation besides online classes. Different initiatives such as parents–teachers virtual communication, social campaign and awareness build-up activities of social volunteer groups might be a catalyst to make the online classes more participatory. If duties and responsibilities are properly distributed and monitored, such community participation could be evolved as a shadow school in the pandemic. In the study, ‘community participation’ precisely indicated the role of the parents and different social/students’ volunteer groups that could function as a bridge between students and teachers in the pandemic.

Virtual Social Groups as a Medium of Communication Between Parents and Teachers

Regular monitoring of students' performance is an indispensable precondition in distance learning. In response to the question of whether WhatsApp and Messenger groups can be a medium of effective communication between teachers and parents to monitor the students' performance at home, it has been found that 55% teachers and 45% parents respectively considered such virtual groups 'very effective', whereas 30% of teachers and 45% of parents thought such group communication would be 'effective' for proper monitoring and supervision of students' performance. See Figure 8.

However, in the pandemic situation, schools had already initiated such types of social group activities. According to a statement of a parent in the FGD, From the last few months, my children's school created two online-based groups; 'Facebook page' and 'WhatsApp' for both students' and parents'. On the Facebook page, students submit their regular homework and with the WhatsApp group teachers usually communicate with the parents. I think, such initiative is very effective to communicate with the teachers.

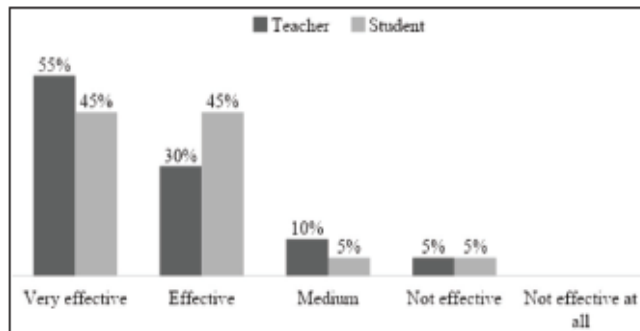


Figure 8. Effectiveness of WhatsApp and Messenger Groups.

Source: The authors (data collected from the field and analysed for presentation).

In the questionnaire survey and FGD session, it has been evident that the necessity for whatsapp and messenger groups among the teachers, students and parents can be very effective to ensure the regular monitoring of the students. In a situation like COVID-19, where classroom-based teaching has gone off for so long, these technological apps and virtual communication between teachers and parents can be a hope for the right evaluation of the study for students.

Role of Social Volunteer Groups to Ensure Effective Online Education

Although this study did not find any prompt activities of local volunteer groups, both teachers and parents were asked about the importance and scope of such interventions to ensure an effective online education in the pandemic. In the response, 85% of teachers and 70% of parents conveyed their opinions in favour of the supportive role of the social/students' volunteer groups (Figure 9).

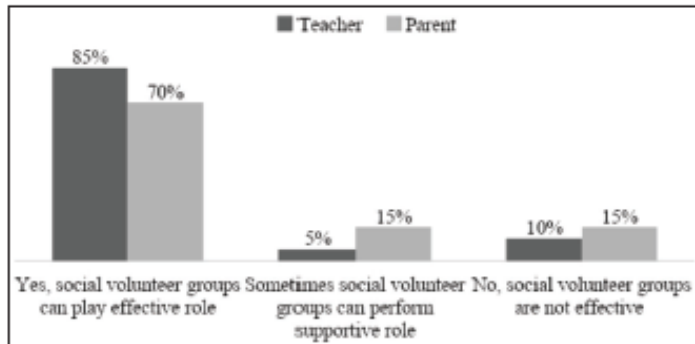


Figure 9. Scope of Performance of Social Volunteer Groups.

Source: The authors (data collected from the field and analysed for presentation).

Respondents suggested that local volunteer/students' groups or social clubs could organise different motivational campaigns and awareness build-up programmes in favour of community radio and TV programmes. Different social clubs and student volunteer groups could informally supervise and monitor school students and motivate their parents to make success of Sangsad TV and radio programmes. Such social responsibilities of the local volunteer groups can be a bridge between students and teachers to implement an effective and inclusive online education. However, one of the school teachers stated:

Community Radio and Television based schooling programmes could be very effective for the students who cannot get access to the online classes regularly. Different social volunteers and non-governmental organisations can assist and monitor the television and community radio programmes to make it familiar among the students via different motivational movements.

School authority and social volunteer groups jointly play a catalytic role and mobilise such groups to overcome existing digital divides through regular communication and social awareness campaign programmes in favour of TV and community radio-based education programmes. However, if local administration

extends their support, then such informal movement could be implemented robustly and effectively. In this context, one of the former ward commissioners shared his opinion in the following way:

During the period of school closure, local social & students' volunteer groups can participate in the educational activities for underprivileged students. Such volunteer groups can visit door-to-door and assist poor students in their day-to-day study and ensure school homework. If local administration guides such volunteer activities, then it will be easier and more effective to get implemented

From the perception of the respondents', it showed that if local social volunteer groups merged their activities with the schools' distance learning, then it would be beneficial for underprivileged students to bolster the academic progress in the pandemic crisis. Respondents' sharing depicted that such informal participation of different social and students' volunteer groups certainly assisted to build resilience and inclusive education for those students who were getting no or less access to the online classes. Furthermore, in parallel to online education, community participation as a medium of communication channel, information sharing and cooperation creates a sense of ownership and assist to minimise the lack of online learning to a great extent, especially in a society where access to ICT remains a big challenge.

Proposed Integrated Framework: Ensure Inclusive Education in the Pandemic

Based on the above interpretation of online education, the study suggests a holistic approach intervention from the policy level to the implementation stage. Figure 10 shows multi-actors at macro, mezzo and micro level will perform within a strategic framework to ensure an inclusive and sustainable online education in the pandemic situation. The ultimate purpose of such intervention was to ensure maximum participation of the students not only in the online classes but also through other activities such as effective implementation of Sangsad TV, community radio and active participation of community people with the online learning.

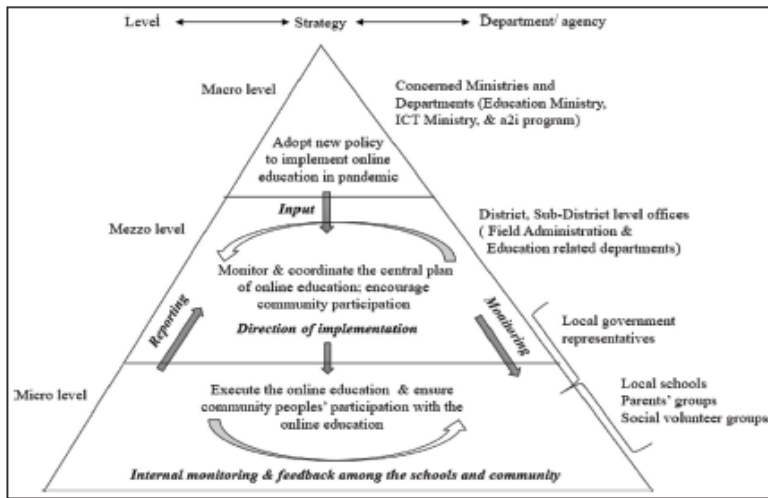


Figure 10. Integrated Approach of Online Education.

Source: The authors.

Macro Level

From the policy level of the government, concerned ministries/departments of education, ICT division and A2i programme should play an inclusive and strategic role to make online classes more participatory. Considering the reality of the pandemic crisis, the government can adopt a unified curriculum for the students that will be offered by module basis in both online classes and offline classes at TV and community radio programmes. When both online and offline classes will be conducted through a unified structure, then students who missed or do not get access to mobile phones and internet will be able to participate in the broadcasted programmes on the television and radio. Moreover, there must be a clear direction about the evaluation process of the students, based on class participation, assignment or quiz test.

Mezzo Level

At the mezzo level, the district and upazila (sub-district) administration will play a monitoring and supervision role to implement the central plan. Local administration along with thana/district/sub-district education offices will determine the vulnerable schools and ensure infrastructural support such as internet connection and necessary device support for online education. Moreover, strategic plans of community mobilisation programmes such as awareness-building campaigns, household-level monitoring of different volunteer groups, parents' groups and school committees will be considered here to make online education successful and inclusive.

Micro Level

At this stage, local schools, students, teachers and community people (parents and social volunteer groups) have been considered as the key actors. Besides implementing the central plan of online learning via online and offline classes, ensuring community peoples' participation will be executed here. Community peoples' participation will be invigorated, when both the online school activity and community radio and television programmes will be broadcasted followed by a unified course curriculum and module-basis lecture. In the questionnaire survey, both teachers and parents depicted the importance of amalgamation of online and offline classes for the inclusion of all categories of students. The study also depicts that, in the pandemic, schools will offer only basic courses with specific, well-structured and clear class lectures. Moreover, parents' and teachers' WhatsApp and Messenger groups, teachers–students small groups and peer group relations would be an effective practice for the distance learning during the pandemic.

To ensure students' participation in the online and offline classes, different social groups and student volunteer groups could play a proactive role through conducting motivational campaigns. Such volunteer groups can function along with the school committee, and local administration can try to provide necessary support within their capacities. Visiting door-to-door, organised social groups can monitor students' participation in the online classes and keep updated the concerned schools. Such an informal monitoring system among the students, community people and schools will assist to build resilience in education during the pandemic.

Conclusion

The shock of the COVID-19 crisis on education was unprecedented. Across the country, the rapid impact of COVID-19 has left many students facing untimely school closures, which eventually became a reason to transform the physical classroom learning into distance learning. However, the situation prompted more rigorous problems such as digital divide where students are having less access or no access at all to the ICT devices. Despite government broadcasting classes on TV and radio and online classes being placed at some schools, many of the students who are participating in online classes were deprived of good technological facilities. The study were conducted in a few suburb areas of Chittagong District,

Bangladesh, where schools were conducting online classes but were ambivalent to crucial problems such as lack of infrastructural facilities, narrow finance and

absence of students' participation and so on. Students lost the motivation to participate in the online classes because of poor internet connection, monotonous nature of classes and lack of proper guidelines. Considering such loopholes, the suggestion from this study is to build resilience with community people, especially with parents and social volunteer groups. The study also suggests strategic measures such as adoption of a new policy for a certain period of time and inclusion of community people, which might play a catalytic role to minimise the loopholes of online learning in the pandemic. In that context, if duties and responsibilities at macro, mezzo and micro levels are precisely defined and implemented, it will assist to define all possible vulnerabilities and challenges of online education in Bangladesh. Alongside the central plan of distance learning via online and offline class, the community people would ensure their presence in every detailed activity for online and offline classes such as being a medium for parents-teachers inter-communication, keeping pace with local administration and arranging social awareness and volunteering campaigns. If the problems that have been identified in the study remain unaddressed, the nationwide school shut-down decision would instigate adverse problems contrary to the achievements of earlier ICT-based education success in Bangladesh.

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