EdTech Hub

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HELPDESK BRIEF No. 30

Monitoring Distance Education

A brief to support decision-making in Bangladesh and other low- and lower-middle income countries

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About this document

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About the EdTech Hub Helpdesk

The Helpdesk is the Hub's rapid response service, available to FCDO advisers and World Bank staff in 69 low- and lower-middle-income countries. It delivers just-in-time services to support education technology planning. We aim to respond to most requests in 1–15 business days. Given the rapid nature of requests, we aim to produce comprehensive and evidence-based quality outputs, while acknowledging that our work is by no means exhaustive. For more information, please visit https://edtechhub.org/helpdesk/.

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Terms and abbreviations

AI	Artificial Intelligence
a2i	'Aspire to Innovate'
BSSRP	Bangladesh Covid-19 School Sector Response Project
DPE	Directorate of Primary Education
DSHE	Directorate of Secondary and Higher Education
ESA	Education Sector Analysis
FCDO	Foreign, Commonwealth and Development Office
LASI	Learning Assessment of Secondary Institutions
LEG	Local Education Group
MoE	Ministry of Education
MoPME	Ministry of Primary and Mass Education
NCTB	National Curriculum and Textbook Board
NGO	Non-Governmental Organisation
NSA	National Student Assessment
PEDP3	Third Primary Education Development Programme
RDD	Random Digit Dialing
ROSC II	Reaching Out of School Children II
SCM	School Community Mobiliser
SEDP	Secondary Education Development Program
SMS	Short Message Service
TfP	Teach for Pakistan

Executive Summary

In July 2020, the UK Foreign, Commonwealth and Development Office (FCDO) requested support from the EdTech Hub Helpdesk to help the Government of Bangladesh begin exploring options to monitor distance education. The scope of the support was to also provide guidance on putting in place systems that would be able to support better monitoring of national distance education programmes. This brief has been developed in response to that request.

The brief serves two purposes. First, it responds to the request from the FCDO. Second, this brief is being published as a global public good. As such, while the document has been designed to focus on the Bangladesh context, it also presents content that will be useful for other countries considering how to monitor distance education.

Section 1 provides the results of a desktop review exploring how distance education has been monitored both during the Covid-19 school closures and other previous school shutdowns. In Section 2 we examine how these lessons might be applied in the Bangladeshi context. In section 3 we provide a set of nine recommendations, before we present 6 potential next steps in Section 4.

We advise reading the recommendations and next steps in full to ensure an understanding of important contextual information. However, below we provide an overview of the recommendations and next steps.

Overview of recommendations

- **Determine what data is required to make strategic decisions:** The first step in any monitoring strategy is to consider what decisions you need to take, and what data you need to collect to inform those decisions. A number of resources included in the recommendations section can support this process.
- **Use all relevant data, but be aware of limitations:** The rapidly changing impact of the Covid-19 pandemic means that obtaining data is difficult. Decision-makers need to accept they will never obtain a full set of complete data that will provide perfect insights. To mitigate this, they should seek access to and be presented with as much relevant information as possible. However, those generating data must clearly highlight the limitations of the data.
- **Think beyond traditional data collection approaches:** Do not be constrained by traditions in the monitoring and research space. It is important to think beyond traditional metrics or traditional research approaches. Novel approaches to data collection should be considered. Several innovative approaches are presented in this report.
- **Collaboratively define and execute a monitoring plan:** Engaging with diverse actors who collect data and undertake studies will complement the government's efforts. Additionally, clearly defining which data points

or research activities are a priority can guide stakeholders' efforts and help to build partnerships. A collaborative effort can help ensure the different priorities of each group are achieved in an effective manner.

- **Leverage cross-sectoral synergies for monitoring:** Education actors are not the only ones looking to quickly gain access to data. Actors across a wide range of sectors are in need of insights to inform decision-making. There is the potential for education actors to create economies of scale by collaborating with personnel from other sectors with similar aims.
- **Put in place platform(s) for storage, analysis, and reporting:** It is essential to put in place a platform(s) for data storage, analysis, and reporting. A well-designed platform(s) and tools can help facilitate these processes, leading to quicker, more high-quality insights.
- **Make participant privacy and safety central to all efforts:** The rush to deliver programmes and gather data and information should not be an excuse to place programme recipients — particularly children and vulnerable families — at risk. In the context of monitoring distance education, these breaches in safety and trust are most likely to be linked to information and online security. This should be considered by those designing data collection.
- **Don't neglect the hardest to reach:** Children with more resources are able to more easily access distance education modalities. Those with more resources are also more likely to be visible in a monitoring exercise. Monitoring efforts must go beyond 'easy' ones to ensure marginalised groups are reached.
- **Align planning and investment with the long term:** When considering all the previous recommendations, it is important to balance short-term needs with long-term investments. This means considering both the short- and long-term implications of all of the above recommendations.

Proposed next steps

Short Term

1. **Collaboratively develop a robust, cohesive monitoring plan:** It is important that government and development partners collaboratively conduct a mapping of existing distance education monitoring activities and additional monitoring activities needed before co-creating a monitoring plan. Multiple tools and pro-formas have been included in this brief to support this process (see Section 3 and Annexes 2 and 3).
2. **Design the plan with decision-making in mind:** Clearly identifying decision points and ensuring data is available in an easy-to-access and digestible format at the required times is an important part of monitoring. When planning these timelines ensure enough time is allocated to undertake data cleaning and ensure information is collated into an accessible format that will provide insights to decision makers.

3. **Collaboratively execute and oversee the monitoring plan:** The plan should clearly define the activities that need to be completed, the parties responsible, and the timeline for completion, and, where relevant, funding mechanisms. Government and development partners should work collaboratively to implement the plan. This includes putting in place or using an existing forum (e.g., the local education consultative group) to track and oversee implementation of the plan.

Medium to Long Term

4. **Streamline and align data collection, processing, storage and dissemination approaches:** Aligning the processes involved in data collection and usage can help enhance the quality of data, leading to more impactful decision-making. The government and partners may wish to undertake a study assessing how approaches can be better aligned within government (e.g., between primary, secondary and religious education). This study could also explore how development partners can better align their data collection efforts to complement government approaches in a way that helps strengthen monitoring systems in Bangladesh.

5. **Create a publicly available platform to share data:** A centralised data hub with a user interface would help ensure that data can be quickly and easily accessed by all types of users — from senior government decision makers to the public. Such a system can be built to ensure that sensitive data is only accessible to certain actors based on their permissions, with some data being publicly available. This would ensure decision-makers can quickly and easily access data when required while also supporting increased levels of transparency and accountability.

6. **Design processes and systems to be able to integrate innovative types of data and innovative ways of collecting information:** In this brief we mention a number of innovative ways to collect insightful data (for example crowdsourcing and citizen-led assessments). The government should strive to adopt new and innovative ways of gaining data. While identifying and adopting the new trends in data collection is an important step, it is important to ensure these new collection processes and systems are built in a way that will allow the government to iteratively integrate new data to complement existing mechanisms.

1. Introduction

On 17 March 2020, Bangladeshi schools were closed to restrict the spread of Covid-19. Overnight, an education system supporting more than 36 million learners pivoted to distance education (⬆World Bank, no date). The government worked in close collaboration with other stakeholders to deploy print, radio, TV, mobile, and online resources to provide educational continuity.

Having rapidly put in place a distance education solution, education leaders now need to understand if the approach is working. While the government and other stakeholders are generating data through a range of assessments and studies, a more systematic approach to gathering robust data is required.

The UK FCDO Bangladesh team requested a topic brief from the EdTech Hub to provide guidance on monitoring distance education in Bangladesh. Specifically, the Hub was requested to provide recommendations, based on lessons learned internationally, on how the government could put in place systems to improve the monitoring of distance education to support strategic decision-making.

The EdTech Hub team conducted a desk review to understand how to best monitor distance education in Bangladesh. Phase one was a rapid review of Bangladesh's education system. The findings of this can be found in Annex 1 of this report. Phase two examined global literature and case studies to identify strategies used to monitor distance education. The review traversed South Asia and other low-income countries globally. This brief focuses solely on monitoring distance education. It does not attempt to explore modalities for distance education or look at the impact of school closures.

To shape our analysis we identified four elements which are critical to both providing distance education and understanding whether learning is taking place. These elements are availability, access, usage, and learning.

- *Availability:* Whether distance education mechanisms are being offered.
- *Access:* Whether materials on offer can be accessed.
- *Usage:* Whether learners are engaging with the materials offered.
- *Learning:* Whether learners are actually learning.

In Section 2 we use the four elements above to frame examples of the way distance education is being monitored globally. Section 3 examines how these practices might be applied in the Bangladeshi context. Section 4 provides recommendations, while Section 5 provides concrete next steps that may be considered as the Government and development partners work to enhance distance education monitoring in Bangladesh.

2. Effective international practices in monitoring distance education

When governments around the world began closing schools to minimise the spread of Covid-19, many countries moved quickly to implement multi-modal distance education programmes. However, they have been slower to develop approaches to monitoring these programmes. ↑Alban Conto, et al. (2020) found that a large number of countries do not measure either access to or learning from distance education. For example, less than 60 per cent of countries monitor access to radio resources, while three-quarters of countries do not monitor learning from radio education. Figure 1 provides more details.

Figure 1. Percentage of countries monitoring user access and assessing learning among 118 countries, by remote learning modality (↑Alban Conto, et al., 2020)
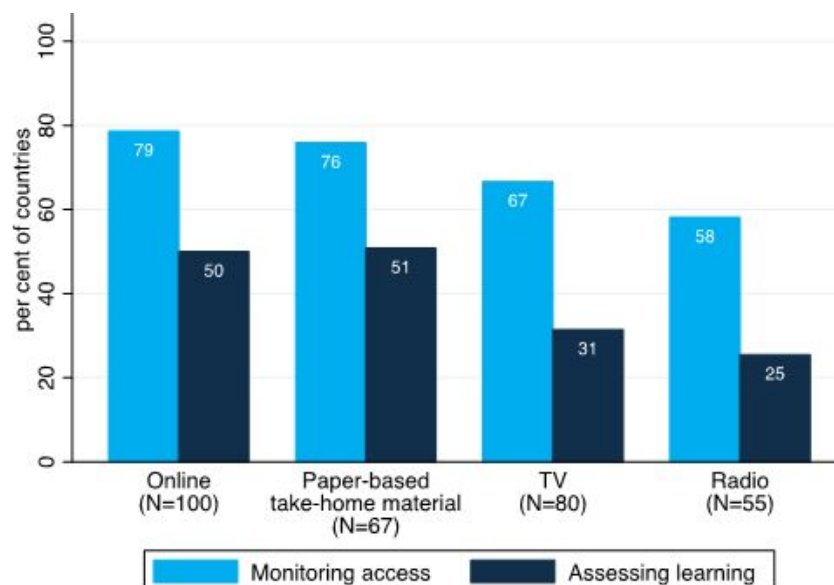
The lack of monitoring means that countries are often not using evidence to inform decision-making. This can result in resources being wasted when programmes do not meet learner needs. This need not be the case. The current wave of distance education programmes provides the opportunity to learn about how to effectively monitor distance education. This section presents the findings of our desktop review exploring how distance education can be monitored. The section highlights examples from around the world.

Our desktop review identified multiple high-level frameworks and general resources discussing distance education monitoring. However, we found fewer resources providing insights into the details of distance education monitoring. Specific examples are hence based on insights from multiple sources that touched on what was monitored, how it was monitored, the costs involved and the levels of success. We expect to see research / learnings in this

area grow as countries try to better understand how to effectively monitor distance.

2.1. Monitoring distance education: guidance and frameworks

By distance education monitoring, we mean any activity that aims to collect reliable, valid, and actionable information on a distance education initiative. Such information is usually generated as part of a cycle: an intervention is designed, implemented, and monitored. The monitoring data is then used to check assumptions and inform adjustments to the intervention. Monitoring is therefore ideally an ongoing process and not a one-time activity. Conversely, monitoring is not evaluation. It does not judge whether an intervention was 'good' or even 'worked'; it provides us with information on the process.

By 'monitoring', we mean a process that tells us what is going well or where we should pay more attention — like formative assessment. 'Evaluation', refers to an activity that attempts to determine impact after implementation — much like summative assessment.

Multiple resources provide broad guidance on monitoring distance education. Below we summarise these resources and the insights gained from them.

Monitoring and Evaluation of ICT in Education Projects by ⬆Wagner, et al. (2005) provides a framework for both monitoring distance education projects including a number of practical dos and don'ts, displayed in Figure 2.

Figure 2: Monitoring distance education (based on ⬆Wagner, et al., 2005)

Include monitoring at all stages of the intervention

Accept that monitoring carries significant cost

Ensure appropriate training for implementers

Involve as many stakeholders as possible including learners

Include monitoring *learning* in monitoring activities

Pilot-test all monitoring instruments before rolling them out

Use findings to improve the programme, not to penalise

Disseminate findings so others can benefit

Don't rely solely on self-reporting in data gathering exercise

A small number of resources have been developed since March 2020 that provide general guidance for countries wishing to monitor distance education services. A recent report by UNICEF emphasises that monitoring exercises require a combination of activities and modalities: a single monitoring activity does not give a full picture (↑Laincheur, 2020). They recommend that to prevent duplication of effort governments should collaborate closely with partners to undertake a stocktake of existing data. Only then should we design a monitoring plan to obtain further required data. Another report by UNICEF emphasises the importance of reaching disadvantaged children and youth and to protect data collected (↑UNICEF Regional Office for South Asia, 2020).

Finally, it is important to emphasise that only the data that is required to make decisions should be collected. Sometimes we can get lost in all the data we could be collecting. Only collect the data you really need for making decisions.

2.2. Availability, access, usage, and learning

Monitoring distance education programmes is complex. There are many different ways that programmes can be monitored, ways in which success can be measured, and indicators that can be obtained to provide insights. With this in mind, based on the insights in the previous sub-section, we developed a framework to guide monitoring. We focus on four important considerations in distance education interventions, all of which require some form of monitoring. These are:

1. **Availability**. A first step is that there need to be distance education mechanisms on offer. If there are online materials, which grades and subjects do they cover, and to what extent? Are educational TV or radio programmes being offered, where are they broadcast, and what subjects and grades do they cover? If content is incomplete, how fast is it being developed?

2. **Access**. A distance education intervention offers resources (e.g., online videos via an online platform or SMS-quizzes, or Interactive Audio Instruction). Monitoring access provides information on whether learners *can* access these resources. If resources are online, do learners have a data package? Do they have a device? Can they charge the device?

3. **Usage**. Access is a prerequisite for use. Learners may have access to electricity, and to radio, but if they are undertaking paid work during lessons they are not using the resources. Monitoring usage tracks if, how often, and how much learners use and engage with the resources.

4. **Learning**. Using material is a prerequisite to learning. While the two previous steps are prerequisites for learning, the ultimate purpose of any distance education intervention is to have learners learn. Monitoring learning measures if learning outcomes are improving.

The relationship between these different factors is highlighted in Figure 3. Each step is a necessary precondition for the next step to be effective: learners cannot learn with distance education if they do not use what is being offered; they will not use what is being offered if they cannot access the material.

Figure 3: Elements to consider when monitoring distance education
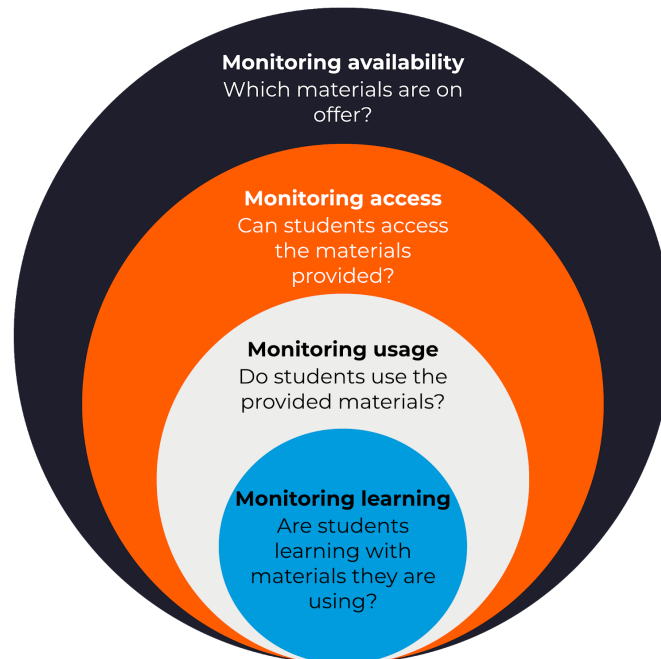
Below we examine approaches to and examples of monitoring each of these elements. The examples represent different approaches to monitoring distance education, and are not comprehensive. Nor are the descriptions exhaustive. Rather, they provide insights that may be useful in Bangladesh.

2.3. Monitoring availability

Most interventions start with making some sort of learning materials available. Such learning materials could include radio and TV, as well as print-based or digital materials. This means that often those undertaking monitoring do not even consider assessing what resources are available in principle. We note that most examples found during our desk review focused on monitoring access, usage and learning, rather than availability.

It is important to consider availability because if you do not know what is available at this moment in time — or what could be available in the near future — then it is impossible to plan initiatives. It is clear that good resources are a necessary condition for effective interventions (cf., e.g., ↑Piper, et al., 2018).

It is important to remember that there is no single source of distance education materials. While materials are often made available by governments, these may be supplemented by materials provided by NGOs, private schools, or indeed companies focussed on education. It's important to

know which resources are being offered and which groups of learners they target; this informs how to monitor where learners actually go to find resources. A scan of available resources can range from a quick check on subjects and grade levels to a detailed skills taxonomy. Such a taxonomy might identify which topics are taught, which learning outcomes are covered, to what extent they align with the curriculum, how many content items there are and the format of the content items. ↑Groeneveld, et al. (2020) provides a description of creating such a skills taxonomy.

The EdTech Hub's rapid country scans have identified opportunities and challenges and mapped EdTech initiatives in 11 countries.[1] The scans used a combination of online desk research and stakeholder interviews. While information about commercial offerings is often available online, this was not always the case for interventions set up by NGOs or private schools, which were uncovered through stakeholder interviews. Although the scans focused on educational technology and not materials (for distance education or otherwise), they reinforce the importance of a combination of data collection methods for monitoring availability.

Several initiatives can help map the distance education providers and initiatives in a country. A rapid Education Sector Analysis (ESA), focused explicitly on distance education modalities, can be a good way to start mapping distance education solutions.[2] This could be coordinated through the Local Education Group (LEG), which is a valuable source of knowledge about actors supporting government programmes. These LEGs are aware of many initiatives and help governments with their response to Covid-19.

2.4. Monitoring access

While there are many programmes in place to support distance education during Covid-19 many of these do not reach learners. Globally, at least 31 per cent of learners from pre-primary to upper secondary schools cannot be reached with distance education during school closures. In certain regions, such as sub-Saharan Africa, 49% of learners are not reached. Moreover, we also note the majority of those learners who are not reached come from poor households or rural areas (↑UNICEF, 2020); in other words, the current programming is deeply inequitable.

Such statistics show that it cannot be taken for granted that such programmes actually reach the intended learners — this needs to be assessed on a case-by-case basis. Access focuses on the extent to which programmes reach learners, including whether they have the technologies or infrastructure needed to access the learning programmes. An important part of monitoring access is to ensure that any interventions do not exacerbate the digital divide.

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[1] This information is available at https://docs.edtechhub.org/lib/?all=rapid+scan
[2] This information is available at
https://learningportal.iiep.unesco.org/en/issue-briefs/plan-for-learning/education-sector-analysis-0

Below we highlight examples of how access has been monitored around the world during the current school closures.

In **Pakistan**, schools were closed in March, during the examination period. Teach for Pakistan (TfP) wanted to understand the impact of school closures on their 2,500 learners. However, many schools did not have learner contact details. TfP used local networks to get in touch with learners' parents. They made announcements in mosques and gathered contact information through local shopkeepers who knew the communities. They managed to reach 1,800 of their learners. Then, a pre-intervention phone survey was conducted to investigate learning and access to devices and the internet. They found that around 60 per cent of learners could be reached through their parents', neighbours' or other community members' phones. Distance education programmes were subsequently rolled out using WhatsApp. Regular monitoring activities were conducted in several ways, building on mechanisms that were in place prior to Covid-19. First, all teachers fill in weekly on-line trackers recording what they do, which are shared with their coaches. Then, coaches have regular, scheduled calls with the teachers. And finally, learners' work — submitted to teachers through paper or WhatsApp — is reported to coaches. This monitoring process led to several adjustments. Paper-based resources were printed and shared with learners to complement WhatsApp. Teachers also started conducting both plenary and individual calls on WhatsApp (T. Akther, verbal communication, 12 October 2020).

Ecuador has implemented an online programme to teach science and entrepreneurship to learners from grades 10–12 (↑Asanov, et al., 2020). Since March, learners have remained in the programme but accessed material from home. Access was monitored by a research team in collaboration with the Ministry of Education. Families of learners who participated received phone calls to monitor learners' access to the materials, usage, and well-being. Following nine attempts, 65 per cent of families, or 1,552 learners, were reached. Of the learners reached, close to 60 per cent had access to both a computer or tablet and internet. However, learners' families that were poorer, were part of ethnic minorities, had mothers with low education, or lived in more remote areas were less likely to be reached, skewing the responses.

Liberia's Ministry of Education implemented radio programming instruction to teach early grade literacy (↑Thomas & Lebah, 2020). The Ministry monitored access through phone surveys. Caregivers of 270 learners were called by School Community Mobilisers (SCMs) who were trained to ask scripted questions about access to the lessons and then enter the answers into Excel. 104 parents in three counties were interviewed. The answers were sent to headquarters where data cleaning and analyses were conducted. The results showed that fewer than half of learners listened to the radio lessons, mainly due to the lack of access, and the majority of learners who listened to the radio did so outside of the home.

2.5. Monitoring usage

In our brief, we define 'usage' as the extent to which learners actually use the distance education materials. Once learners have access to a distance education programme, 'monitoring usage' means assessing how often they actually access the provided materials. Usage can be monitored through phone surveys, interviews, online application tracking, media usage, etc. For behavioural data such as usage, surveys tend to be a less reliable source than methods that actually track usage, such as online usage statistics.

In **Mali**, interactive audio instruction has been broadcast by SIRA through Radio Mali to provide educational continuity (↑anon. Monitoring of continuité pédagogique (Radio Mali) in SIRA project zones, no date). On three occasions, enumerators conducted phone surveys to investigate, amongst other things, how often learners listened to the lessons. In addition, caregivers were asked whether they were able to access textual support for the radio lessons. These surveys resulted in the discovery that children were found to listen to lessons not appropriate for their age. Moreover, the lack of access to radio was a major hurdle for many families and few caregivers had internet access. In spite of caregivers being aware of the lessons, many caregivers did not understand that the lessons only took 30 minutes per day. The results of the surveys were used to adjust the radio lessons.

In **India, Ghana, Peru, Jordan, Kenya**, and **South Africa**, World Reader's free reading app has provided free books that can be used through the internet, offline apps and feature phones (↑anon. Keep Children Reading: Monitoring Reading Data During Covid-19, no date). Worldreader tracked usage data through the application. This included the average time a child reads per session, the total time a child reads, and which books are popular.

Ubongo is delivering TV shows and programmes for 17 million early childhood and primary learners in **several sub-Saharan countries** (↑Ubongo, 2020). They use multiple sources to measure both reach and engagement (N. Ligon, verbal communication, 5 October 2020). Reach is monitored through TV usage data, which they procure from Kantar-Geopoll, a company specialising in audience data for print, radio, and TV usage. Kantar-Geopoll charges between $800 and $2,000 per month per country for this service. Ubongo also conducts annual surveys through IPSOS Tanzania and Sagaci Research to corroborate the data and better understand reach and engagement. Further data are collected through telephone surveys of randomly selected Ubongo registrants, again through external companies. Engagement is monitored through YouTube data, which includes the duration of a session. Finally, usage is further monitored through randomised control trials among users. Internal research at the pre-production phase also exists alongside other methods of formative data to determine programme reach (↑Watson, 2019).

2.6. Monitoring learning

The purpose of any education intervention is to improve learning outcomes. Availability, access, and usage of materials are necessary conditions, but they are not sufficient. The ultimate purpose is learning. Besides improving learning outcomes, distance education programmes can potentially mitigate learning loss. Monitoring learning helps governments to observe whether learning outcomes are reducing, are stable, or are increasing. Tracking learning outcomes is important, as it not only informs how to tailor distance education programmes but also informs interventions at school when they reopen. Recent research has shown that only a third of lower- and middle-income countries assess learning in remote learning interventions (↑Alban Conto, et al., 2020).

In **Botswana**, primary school children had been taught numeracy through either SMS messages alone, or SMS messages with phone calls by a tutor (↑Angrist, et al., 2020; ↑Angrist, et al., 2020). Numeracy skills were assessed through phone surveys. Enumerators called parents and asked to speak to their child. In order to encourage honest responses, efforts were made to stress that the assessment was 'low-stakes' and that there would be no consequences to the test score. Instructions were kept simple so that children could understand the questions. The research found that phone calls are a valid tool for measuring select learning outcomes, and that distance teaching interventions combining phone calls with SMS proved most effective. The researchers concluded that responses to assessment increased when calls were preceded by an SMS or a call to put the caregiver or child at ease.

In **Pakistan**, Idara-e-Taleem-o-Aagahi initiated a programme in 2018 providing marginalised adolescent girls in South Punjab who have dropped out of schools with basic education. In April, the programme shifted to a distance model. First, the programme mapped devices and access through phone surveys. The enumerators reported the findings through software systems which were collected, cleaned and presented centrally in a dashboard based on Microsoft's Power BI tools. The initial survey led to content being delivered through a mix of modalities, such as WhatsApp, SMS, memory sticks and paper-based resources. During the programme, learning is monitored through fortnightly formative assessments. Learners attempt assessments with the teachers during a call, after which teachers upload results to the programme management portal. Teachers are trained in using phone calls, SMS messaging and WhatsApp (S. Saeed, email, 14 October 2020). The participation rate is 80 to 100 per cent, although some results come in late. Results from the monitoring activities showed that low-tech solutions, such as TV and radio, are most effective in reaching disadvantaged learners. They also found that teachers from the same community have an advantage in delivering content and monitoring learning effectively.

2.7. Examples of community-sourced data

So far we have looked at how distance education availability, access, usage, and learning can be monitored. However, there is one approach that we will discuss separately: community-sourced data collection. Community-sourced data collection is a way of building a dataset with active participation of the audience. It has the potential advantages of being able to generate data quickly and cost-effectively. A downside of the approach is that samples are not always representative.

The UK think tank **Nesta** is studying and codifying methods that have been used to harness diverse groups of people, data, and technology to achieve positive outcomes (↑Peach, et al., no date). While still in the early stages of testing, Nesta's *Collective Intelligence Design Playbook* includes global case studies demonstrating the application of collective data collection methods including crowdsourcing, 'open AI' , crowd mapping, gamification, micro surveys, and a 'data collaborative' (an agreement between a collaborative of organisations to share data for a specific cause). It does not claim to be a robust data collective tool, but rather to "find fresh insights, more effective solutions, and create new collaborative approaches to drive real change" (↑Peach, et al., no date, p. 7). This makes it appropriate to be used in conjunction with other monitoring methods.

Below, we discuss several examples of community-sourced data.

SMS Voices is a system to enable dialogue between remote citizens and their local councillors that has been deployed in Sierra Leone, Kenya, and Ghana.[3] Farmers, teachers, parents, learners, community leaders, and traders from under-served regions become community reporters. In this role, they interview community members and feed the results into a secure SMS system. These results are analysed and reports produced. An advantage is that, because of the local interviewer, illiterate respondents and respondents otherwise unwilling to participate can be engaged.

Likewise, **U-Report**, developed by UNICEF, is used in 41 countries to send polls and alerts to 3 million users.[4] U-Report can provide real-time data through polls and ad hoc questions during disasters or other events through its zero-rated SMS polls or WhatsApp polls, and has been used to poll learners on their distance education situation.

Monitoring and evaluating programmes with the help of citizens can be done through **citizen-led assessments** (↑Plaut & Jamieson Eberhardt, 2015). This method involves recruiting and training volunteers to undertake data collection in their local area. In June 2015, Results for Development published an evaluation of four citizen-led assessments as part of an evaluation of education programmes across India, Mali, Senegal, Kenya, Tanzania, and

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[3] Information available at https://onourradar.org/project/sms-voices/
[4] Information available at https://www.unicef.org/innovation/U-Report

Uganda. The evaluation found that these assessments can measure a narrow set of competencies very well and volunteers can be effective at conducting research. However, to ensure quality you need strong partner organisations to support the work, comprehensive training for volunteers and a skilled quality assurer. Additionally, these require high capacity, and are a time- and resource-intensive process, so — like many other assessments — they are suited for deployment every two to three years.

2.8. Summary of insights from case studies

The case studies above vary in their methodologies, questions, and objectives. However, the case studies provide us with a number of insights and recurring findings on the integration of monitoring, data, and phone surveys, provided in Table 1.

Table 1: Insights and findings from case studies on monitoring distance education

Integrating monitoring into an intervention	Monitoring is most effective when it is an **integral part of the intervention**. That means it needs to be planned for and budgeted at the start. Monitoring appears **most prevalent** where it is **easiest**, not where it is **most needed**. Some modalities (TV or radio) or target groups (minorities or illiterate people) require creative methods or multiple data sources. Monitoring can be **integrated into existing, non-education monitoring activities**. Partners monitoring activities on issues like health may include questions on education.
Information access	Decision-makers need information in a **coherent and understandable format**. Data must be cleaned and analysed for it to become useful to decision-makers. Effective monitoring practices need an appropriate **turnaround time**. If the data is not used for a while, it may no longer be representative, and will no longer be useful.
Phone surveys	Phone surveys are **most widely used but have limitations in their usage.** Phone surveys are easy to deploy but not all questions can be answered through surveys. Phone survey data should be **corroborated with data from other sources**. Phone surveys are less reliable for behavioural information. Data from partner organisations, private companies, visits, etc. help to provide a more complete picture. Phone surveys often need **multiple attempts** and work best with **experienced enumerators**. Phones are often not answered on first attempts, and vulnerable people, especially children, are more likely to respond when the enumerator is familiar. **Short, simple and clear scripted questions** are best. Phone surveys work best when respondents understand the questions and when responses can be compared. Phone calls can be used to **monitor learning** with a deliberate approach. Some subjects, such as languages, are more suitable for phone assessment than others. SMS assessments are **engaging**, but **not reliable assessment tools**. Caregivers tend to assist children with SMS assessments.
Online tools	Online distance education tools can and should have **in-built monitoring capabilities**. Availability, usage, and learning insights can be generated through in-built tools in online platforms.

3. Aligning distance education monitoring approaches to the Bangladesh context

Using the analysis in Section 2 as a foundation, this section provides guidance on:

- **metrics** that Bangladesh may wish to measure in relation to distance education (what to collect);
- **mechanisms** that can be used to collect this data (how to collect it);
- ways that data can be used to **inform decision-making** (how to use it).

3.1. What to collect

For a reliable picture of availability, access, usage, and learning, a wide range of sources should be consulted. The example of Ubongo in Section 2 shows how to use various data sources creatively. Table 2 makes some suggestions, without aiming to be comprehensive, of what data can be collected to monitor distance education. The last column provides some initial thoughts on how this can be collected; this is expanded in greater detail in the following sub-section.

In Table 2, metrics have been divided using the availability, access, usage, and learning elements. Many metrics have been identified through the analysis outlined in Section 2. Other metrics have been taken from the Accelerated Fund Request (↑Global Partnership for Education, 2020).

Surveys and assessments should use representative samples, rather than seeking to collect data on every child, census-style. The purpose of monitoring is not to assess the progress of individual learners, but to assess the overall efficacy of a given distance education programme and inform intervention refinement. Methodologies suggested in one section can often be combined with those in other sections, but are presented separately here. Note that the following table is kept deliberately short and only provides key examples. Further details are available in Annex 2, which contains an expanded list of examples of metrics and methodologies.

Table 2: Examples of data to collect and how to collect it to monitor distance education

Metric	What to collect	Methodologies and sources
Availability		
Number of subjects and grades with appropriate digital content covering the entire curriculum	• Data on readily available or upcoming digital content	• If content is being added continuously: monthly status and progress report from content curation and creation team (↗Groeneveld, et al., 2020)
Access		
Learners with access to TV, radio, devices, internet	• Generic data of homes with electricity, internet, devices, a combination of these, TV, radio, smartphones, feature phones; disaggregated per region and socio-economic background	• Bangladesh Telecommunication Regulatory Commission[5] • Bangladesh census data
Usage		
Learners using radio content	• Usage data on frequency and duration of programme(s)	• Phone surveys • Statistics via private firms • Teachers • Community workers
Learning		
Online learning outcomes	• Assessment data on learners using materials	• Online quizzes through dedicated platforms

As this brief is being written several institutions have, or are planning to, conduct studies and data collection activities on the impact of Covid-19 on learning and remote education in Bangladesh. The studies can support monitoring in several ways. First, the methodologies can be adopted or adjusted and included in monitoring activities. Second, they may identify questions or metrics that can be asked or measured during monitoring activities. Finally, even if only conducted on a one-off basis, studies can help inform decision-making at points in time or in relation to specific topics. As these studies are commissioned and executed, it may be useful to consider whether elements contained in the above table can be incorporated into them.

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[5] This information is available at http://www.btrc.gov.bd/

3.2. How to collect it

Data gathering during Covid-19 is challenging because it may not be possible to use some common and effective means of data collection, or it means that they cannot be used as effectively, due to social distancing (focus groups, in-person interviews, etc). In the case studies and the table above, there is a high reliance on phone interviews. However, telephone interviews and surveys carry risks that require mitigation. Figure 4 presents the pros and cons of this medium.

Figure 4. Pros and cons of telephone surveys

+	Can be used with illiterate respondents	−	Self-report and behavioural survey data can be invalid or unreliable
+	Can yield qualitative data	−	Requires training for enumerators
+	Can yield quantitative data	−	Data needs to be recorded, collected centrally and cleaned quickly
+	Most effective when respondents know enumerator	−	Low response rate leaves vulnerable groups underrepresented
+	More cost-effective than in-person visits	−	More costly than SMS- or online surveys

Using a wide range of tools to monitor the different angles of monitoring reduces the risk of bias in the data and helps safeguard the validity and accuracy of data. Not all tools are suitable for all aspects of distance education. Some approaches that could be considered — on their own or in combination — are:

- **Community-based sources** can create data sets, support citizen-led assessments, and gather data difficult to access elsewhere. However, they require a high level of training and investment. For example, ⬆Plaut & Jamieson Eberhardt (2015) report on a citizen-led assessment activity, where the community conducted the assessment activities.
- **Third-party data** may be available for free or may be available for purchase from commercial providers. Consider the quality of data whichever source you use. For example, the GSMA[6] publishes data on telecom usage and penetration around the world.
- **Market scans** are desk research activities that take stock of all available information sources or products and can help build a baseline of

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[6] Information available at https://data.gsmaintelligence.com

knowledge. For example, the EdTech Hub has conducted Rapid Scans[7] in several countries to understand the market, opportunities, and challenges.

- **Stakeholder & partner networks**, such as LEGs, or activities such as joint sector reviews or ESAs, provide an in-depth view of the educational situation.
- **Phone surveys and interviews** are the most widely used means of monitoring. Phone surveys are structured and provide quantitative data, while interviews can also provide qualitative data. For example, Annex 3 contains an example taken from a sample set of questions taken from UNICEF's Regional Office South Asia.
- **SMS surveys** are by far the cheapest but are likely to exclude people who are not sufficiently literate. For example, UNICEF's U-Report[8] can gather information very quickly among its large groups of registered respondents.
- **Online quizzes** give actual learning data but are limited to the small group of learners who can and do go online for learning. For example, Egypt contracted Edmodo to provide online lessons, including online assessments when the Covid-19 crisis hit (↑El Zayat, 2020).
- **Online tracking** provides actual usage data but is limited to learners using online learning. Any online learning tool provides tracking data.
- **Paper-based monitoring** is accessible and feasible when there are no other means, but requires a local teacher or worker to collect, record, and report the results.

Some of the approaches outlined above are more appropriate for gathering data related to a specific element of monitoring — availability, access, usage, or learning. Figure 5 maps the type of monitoring approach against the stage in the distance education life cycle at which it can be most useful.
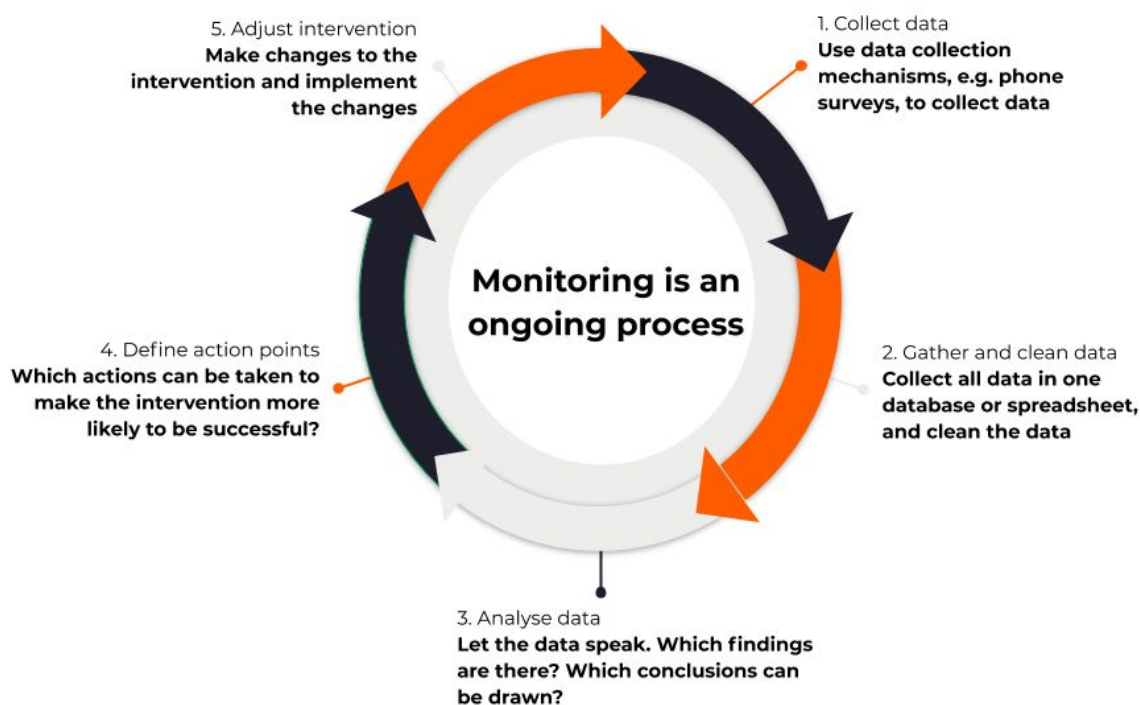
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[7] Information available at https://docs.edtechhub.org/lib/?all=rapid+scan
[8] Information available at https://www.unicef.org/innovation/U-Report

Figure 5. Possible tools and their applicability for different monitoring questions

	Availability	Access	Usage	Learning
Community-based sources	✓	✓	✓	✓
Existing third party data	✓	✓	✓	
Market scans	✓	✓		
Stakeholder & partner networks	✓	✓		
Phone survey	✓	✓	◪	
Telecommunications Authority		✓		
Phone interview / assessment		✓	◪	✓
SMS survey		✓	◪	
Online formative quizz			✓	✓
Online tracking			✓	
Paper-based monitoring				✓

3.3. How to use it

We define monitoring as an activity to collect reliable, valid, and actionable information on a distance education intervention. Most of the case studies discuss data gathering. However, the purpose of data is to draw conclusions and make adjustments to an intervention. Monitoring is an ongoing process in any intervention with different steps in a cycle, as shown in Figure 6 and explained in more detail below.

Figure 6. Monitoring is an ongoing process

5. Adjust intervention
Make changes to the intervention and implement the changes

1. Collect data
Use data collection mechanisms, e.g. phone surveys, to collect data

4. Define action points
Which actions can be taken to make the intervention more likely to be successful?

Monitoring is an ongoing process

2. Gather and clean data
Collect all data in one database or spreadsheet, and clean the data

3. Analyse data
Let the data speak. Which findings are there? Which conclusions can be drawn?

1. **Collect data**. Raw data will arrive via different mechanisms, e.g., SMS data, survey data, observation data, data through private service providers.
2. **Gather and clean data**. All data should be cleaned. Bring together the different datasets in one overview or dashboard where different data sources can be compared and interpreted.
3. **Analyse data**. Based on the data, draw conclusions and report summaries. Conclusions and summaries can then be disseminated to all stakeholders.
4. **Define action points**. Are there actions that need to be taken, based on the analysis? Are there problems that need to be addressed, or tweaks that can be tried to make the intervention more effective?
5. **Adjust intervention**. Continue the intervention or adjust it before starting a new monitoring cycle

For the cycle to be effective, a quick turnaround is important. Nonetheless, rigidity in the design of a monitoring system may be counter-effective. Including a series of reflect-and-adapt moments to adjust the monitoring process may result in a comprehensive monitoring framework that still allows for the flexibility to make changes to the monitoring process itself.

4. Recommendations

Based on the preceding analysis, we outline a number of recommendations below.

4.1. Determine what data is required to make strategic decisions

The first step in any monitoring strategy should be to undertake a rapid analysis that identifies the data required to be able to make strategic short-/medium-term decisions. For this, you should first consider what decisions you might need to take; once you have decided this, consider what data you need to collect to inform those decisions.

The insights in Sections 2 and 3 of this topic brief provide Bangladeshi decision-makers with a framework to undertake this analysis. Consideration should be given to which metrics decision-makers require to better understand availability, access, usage, and learning in the current context.

In the Bangladeshi context, it would be beneficial to undertake a review of the guidelines and frameworks noted in this study to ensure that relevant metrics that can be collected are considered. The frameworks to review include:

- *Monitoring and Evaluation of ICT in Education Projects: A Handbook for Developing Countries* (⬆Wagner, et al., 2005). We suggest paying particular attention to Chapter 3: Core Indicators for Monitoring and Evaluation Studies in ICTs for Education, and Chapter 4: Developing a Monitoring and Evaluation Plan for ICT in Education.
- UNESCO's *Guide to Measuring ICT in Education* (⬆Institut de statistique de l'Unesco, 2009). Particular attention should be paid to Chapter 5: Expanded list of internationally comparable indicators and methodological implications.
- UNICEF's *Covid-19: Effects of School Closures on Foundational Skills and Promising Practices for Monitoring and Mitigating Learning Loss* (⬆Alban Conto, et al., 2020). Particular attention should be paid to Chapter 4: Promising practices for the delivery, monitoring and assessment of remote learning.
- UNICEF's *Monitoring Learning Continuity During School Closures* (⬆Laincheur, 2020). Particular attention should be paid to Step 3: Considering various monitoring modalities, and Step 4: Questionnaire / survey design considerations.

Table 2 provides an overview of some metrics we suggest would be useful to collect in the Bangladeshi context. Annex 2 expands on this list further.

4.2. Use all relevant data but be aware of limitations

Due to the rapidly changing impact of and approaches to managing the Covid-19 pandemic, obtaining data is difficult. In-person data collection can be difficult and dangerous to deploy. Where data is available, it may be sample-based, targeted towards a niche population group, or obtained through less traditional collection approaches. At the same time, decision-makers are often presented with multiple sets of data that are not comprehensive, may conflict with each other, or may not be exactly what they require to make a decision.

In this situation, decision-makers need to accept that they will never obtain a full set of complete data that will provide perfect insights into the challenges they are addressing. To mitigate this, they should seek access to and be presented with as much relevant information as possible. However, those generating data must clearly highlight the limitations of the data they present to ensure that decision-makers understand the strengths and limitations of the insights they receive.

In the Bangladeshi context, this means that decision-makers should actively seek data to inform decision-making processes from a variety of actors. In addition to government-led data collection efforts, the government should collaborate with development partners, non-governmental organisations and private sector agencies who are independently collecting data to inform their own decisions. This data can provide nuanced insights that larger-scale government collections are unable to generate. Examples of these kinds of reports in the Bangladeshi context include the World Bank's survey on TV-based learning (⬆Biswas, et al., 2020), BRAC's report on learning during Covid-19 (⬆Asadullah, 2020), and in-progress and planned research including the Campaign for Popular Education's Education Watch report, Save the Children's household survey on "Availability of Electronic Devices and internet", and the Asian Development Bank's study on learning loss.

4.3. Think beyond traditional data collection approaches

It is important to avoid being constrained by traditions in the monitoring and research space. The purpose of the monitoring discussed throughout this brief is to better inform decision-making related to supporting learners during the Covid-19 school closures and beyond. To that end, it is important to think beyond traditional metrics used in education sector analyses, or traditional research approaches deployed in academic research. Gathering data and reporting on these metrics often takes place in an annual cycle and will be too slow to inform the kind of rapid decision-making required in the current context. Novel approaches to data collection should be considered to gather rapid, regular data to inform decision-making now.

In the Bangladeshi context, government actors could build upon the excellent work done today in conducting large-scale data collections and producing high-quality analytical reports such as the annual primary school census and the annual sector performance report. These approaches should be complemented by cutting edge data collection approaches. Mechanisms that might be used to gather insights include, but are not limited to:

- In-person collections at key local neighbourhood service providers such as Mudi Dokans (corner / neighbourhood shops);
- Short-touch surveys conducted using Facebook, Google Forms, SMS, and WhatsApp;
- Longer surveys using telephone calls;
- Solicited and unsolicited feedback and insights via social media platforms;
- In-built analytics from digital platforms (e.g., number of subscribers, number of logins, time on task, etc.)

Each approach has both advantages and disadvantages. Monitoring by SMS is a cost-effective and fast way to gather information; it may be possible to report on the data collected within a week. However, response length is limited and it excludes certain groups of people, e.g., those who cannot access a phone and those who are not sufficiently literate in the survey language. In-person / phone surveys can gather more detailed insights, but are not as cost-effective and may take longer to process data. Measuring access and especially usage through other means (for example online usage statistics) yields more accurate data, but it can take longer to deploy the functionality to collect such metrics if it is not already built into the platform.

4.4. Collaboratively define and execute a monitoring plan

Engaging with diverse actors who collect data and undertake studies will help complement the government's own efforts. Collaboration between various actors is so important it has been included as one of the nine Principles for Digital Development, endorsed by many governments and development partners around the world.[9] At the same time, clearly defining which data points or research activities are a priority can guide the efforts of these external stakeholders and serve as an opportunity to build partnerships with important actors in the education sector. A collaborative effort, in which the government invites the various stakeholders to collaboratively define these priorities, can help to ensure the different priorities of each group are met in an effective manner. The outcome of any such collaboration should be a clear monitoring and research plan that identifies:

- which indicators should be collected and which studies undertaken;
- how, when, and by whom these activities will be completed;
- the sources of funding for each of these initiatives;

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[9] Resource available at https://digitalprinciples.org/principle/address-privacy-security/

- how results will be shared amongst all actors and then disseminated more broadly.

In the Bangladeshi context, education system dynamics are complex. There are different government and non-government actors involved in the delivery of education services. Additionally, much research has already been conducted or is in process or planning. The focus now should be on ensuring collaboration across all partners so as to reduce duplication of effort. This means the government and other education sector actors should focus on coordinating these efforts, before considering commissioning further research.

The government should now convene these various actors in a single forum to collaboratively develop a research plan. A useful platform could be the LEG; however, this could even be expanded to invite other organisations (e.g., large-scale private companies) not traditionally part of this platform. Collaboration should start with a mapping of what research has already been conducted and what studies are planned but not yet executed. Next, participants should identify any gaps which the government does not have the capacity to execute and identify how these can be integrated into planned studies, or whether other agencies can support these initiatives. The plan should support frequent data collections that can be processed quickly. It is important to focus on short-term initiatives that can rapidly influence decision-making. Studies that require substantial commissioning, collecting, process of reporting times are less likely to be of benefit to decision-makers. Finally, it is important to consider including a consistent set of indicators across all studies / research / monitoring tools to help gain a greater understanding of some key metrics (e.g., access to materials, hours of usage) at a larger scale.

4.5. Leverage cross-sectoral synergies for monitoring

Education actors are not the only ones looking to quickly gain access to data to inform decision-making. Actors across a wide range of sectors — health, social protection, energy, and infrastructure to name a few — are all in need of up-to-date insights to inform decision-making. There is the potential for education actors to create economies of scale by collaborating with personnel from other sectors with similar aims. This can also help to reduce survey fatigue amongst the population more broadly who are being approached for multiple data collection efforts. For example, in Sierra Leone, public schools are collecting health data via tablets designed to monitor school attendance, providing health actors with important insights (C. McBurnie, verbal communication, 12 October 2020).

In the Bangladeshi context, the government should consider expanding its collaboration beyond just those in the education sector. While it is not necessary to include these other agencies in the process of defining the

monitoring and research plan, collaborations on data collection should be actively sought. While collaborating with other government agencies may generate useful data, the government should look to work closely with multi-sectoral development partners and NGOs who may be able to more rapidly facilitate cross-sectoral data collection. For example, BRAC or UNICEF may be able to more rapidly engage with health sector actors who can quickly collect education metrics through pre-existing data collection mechanisms. Education sector leaders may be able to advocate with colleagues in other sectors to include education indicators in non-education or broader data collection efforts.

4.6. Put in place platforms for storage, analysis, and reporting

While designing and executing high-quality, relevant, monitoring processes lays the foundation for robust decision-making, it is essential to also put in place platforms for data storage, analysis, and reporting. A well-designed platform and tools can help facilitate these processes, leading to quicker, more high-quality insights. In some cases, such platforms can build on national systems that are already in place (such as education management information systems). This is particularly relevant when collecting data that aligns with pre-existing collections or storage structures. For example, if a new data collection gathers school- or learner-level data, this can be integrated into existing databases and aligned with school or learner identifier numbers to facilitate deeper analysis. Other new data, such as that from anonymous sample surveys or data obtained from third parties, should also be placed into a platform for short-term analysis and reporting and long-term storage, but may not be able to be aligned with existing identifiers.

In the Bangladeshi context, efforts should be made to put in place systems which allow the government to have quick and easy access to data for analysis and reporting in the short term, and storage and reference in the long term. There are a number of approaches and different tools that could be put in place when considering this platform. However, these are contingent on both the existing platforms and the capacity within the existing data collection and storage capacities within the DPE, MoPME, DSHE, and MoE. For example, the existing platforms may be able to be easily adapted to incorporate additional databases where the additional data can be stored with a low level of effort at a small cost. Alternately, they may be relatively rigid, which will mean that significant efforts and expenditures would need to be incurred to make changes, and the government may wish to put in place an additional, stand-alone, complementary platform. We recommend that the government first engage a business analyst who can quickly and easily gain an understanding of their needs, their existing platforms, and how the needs can be quickly and easily met to support storage, analysis, and reporting in the short term, while also ensuring that any investments will also contribute towards longer-term goals.

4.7. Make participant privacy and safety central to all efforts

During emergencies, the rush to deliver programmes and gather data and information can often result in programme designers and implementers taking shortcuts to meet needs more rapidly. This has the potential to result in breaches to existing norms, or scenarios that go beyond current guidelines and into unexplored spaces where rules and regulations have not been developed. This should not be an excuse to place programme recipients — particularly children and vulnerable families — at risk. In the context of monitoring distance education, these breaches in safety and trust are most likely to be linked to information and online security. This should be considered by those designing data collections.

In the Bangladeshi context, utmost care must be taken to protect the privacy and safety of respondents. Privacy and safety of children should be safeguarded in protocols and in practice. Data can be used to monitor learning, but organisations should monitor how data is used and who uses the data. Currently, there is no full legislative framework in place to safeguard online security and privacy of learners (⬆Hossain, et al., 2018). Until broader regulations are in place, the Bangladeshi government could consider implementing an existing framework. We recommend Bangladesh consider endorsing the Digital Principles for Development.[10]

4.8. Don't neglect the hardest-to-reach

The Covid-19 pandemic and the associated school closures are further exacerbating already existing inequalities in the education sector and beyond. Those with more resources are able to more easily access distance education modalities and absorb the shocks that come with the pandemic. They are also more likely to be visible in a monitoring exercise: to have access to phones and to be sufficiently literate to be able to respond to SMS messages or other written forms of surveys.

In the Bangladeshi context, this means ensuring that monitoring efforts adequately reach the most marginalised groups. This might include, but is not limited to, children not currently attending school, children in urban slums, remote and rural areas such as *haors* and *chars*, and children in the Rohingya camps in Cox's Bazar. These groups may be most easily reached through existing mechanisms supported through non-formal education providers and NGOs who provide schooling to the hardest-to-reach children.

4.9. Align planning and investment with the long term

When considering all the previous recommendations, it is important to balance short-term needs with long-term investments for a number of reasons. First, any short-term approaches should not fragment or impede

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[10] Resource available at https://digitalprinciples.org/principle/address-privacy-security/

longer-term reform initiatives. The short-term responses pursued during current school closures are targeted at a unique set of circumstances, and not all initiatives will be helpful in the longer term. Education actors should ensure that the short-term emergency does not detract from the pursuit of longer-term goals to achieve higher quality education for learners. Additionally, it is increasingly likely that the Covid-19 pandemic will be followed by an economic downturn. Funding may not be as readily available from development partners. Short-term planning should therefore also consider future longer-term needs, with alignment between the two where possible.

In the Bangladeshi context, this means considering both the short- and long-term implications of all of the above recommendations. Some naturally complement both short- and long-term pursuits. For example, fostering even closer relationships with development partners and NGO actors who can supplement government activities can generate benefits in both the short and the long term. Conversely, some recommendations require implementers to consider short- versus long-term needs. For example, the recommendation focused on putting in place platforms to support storage, analysis, and reporting could be looked at through a short-term or long-term lens. A short-term-focused initiative would focus on quickly putting in place a supplementary platform to house the different data collected during the school closures. A longer-term initiative might focus on enhancing the existing platforms or even creating greater integration between the existing MoPME / DPE and MoE / DSHE platforms. This longer-term approach requires considerably more time and funding. Education actors should consciously consider the short- and long-term repercussions of each of these important decisions.

5. Next steps

Having outlined recommendations in the previous section, below we provide six next steps the government and development partners may consider taking. We have divided these into short (i.e. within the coming months) and medium to long term (i.e. six months to two years).

Short Term

1. **Collaboratively develop a robust, cohesive monitoring plan:** It is important that government and development partners collaboratively conduct a mapping of existing distance education monitoring activities and additional monitoring activities needed before co-creating a monitoring plan. Multiple tools and pro-formas have been included in this brief to support this process (see Section 3 and Annexes 2 and 3).

   Given the increased workload already placed on both government and development partners during the current crisis, it may be useful to engage an external firm to support these activities.

2. **Design the plan with decision-making in mind:** Clearly identifying decision points and ensuring data is available in an easy-to-access and digestible format at the required times is an important part of monitoring. When planning these timelines ensure enough time is allocated to undertake data cleaning and ensure information is collated into an accessible format that will provide insights to decision makers.

   It would be useful to start this process by conducting a consultation session with senior government decision-makers to develop an understanding of the types of information they require to make decisions, and how they would prefer information was synthesised to enhance their ability to make informed decisions.

3. **Collaboratively execute and oversee the monitoring plan:** The plan should clearly define the activities that need to be completed, the parties responsible, and the timeline for completion, and, where relevant, funding mechanisms. Government and development partners should work collaboratively to implement the plan. This includes putting in place or using an existing forum (e.g., the local education consultative group) to track and oversee implementation of the plan.

   While collaboration is important, it is also necessary that clear leadership and lines of accountability are in place. Any oversight/coordination body should be formed in line with clear terms of reference establishing their mandate to oversee these activities.

Medium to Long Term

4. **Streamline and align data collection, processing, storage and dissemination approaches:** Aligning the processes involved in data collection and usage can help enhance the quality of data, leading to more impactful decision-making. The government and partners may wish to undertake a study assessing how approaches can be better aligned within government (e.g., between primary, secondary and religious education). This study could also explore how development partners can better align their data collection efforts to complement government approaches in a way that helps strengthen monitoring systems in Bangladesh.

   The study should generate clear and actionable recommendations that provide government and development partners with a concrete path forward.

5. **Create a publicly available platform to share data:** A centralised data hub with a user interface would help ensure that data can be quickly and easily accessed by all types of users — from senior government decision makers to the public. Such a system can be built to ensure that sensitive data is only accessible to certain actors based on their permissions, with some data being publicly available. This would ensure decision-makers can quickly and easily access data when required while also supporting increased levels of transparency and accountability.

6. **Design processes and systems to be able to integrate innovative types of data and innovative ways of collecting information:** In this brief we mention a number of innovative ways to collect insightful data (for example crowdsourcing and citizen-led assessments). The government should strive to adopt new and innovative ways of gaining data. While identifying and adopting the new trends in data collection is an important step, it is important to ensure these new collection processes and systems are built in a way that will allow the government to iteratively integrate new data to complement existing mechanisms.

Annex 1: Education in Bangladesh

This annex provides an overview of the education system in Bangladesh and briefly examines the country's education response to Covid-19.

Education sector overview

Bangladesh has made considerable progress in enhancing access to education over the last decade and is now increasingly focused on enhancing quality. Recent and ongoing reforms aim to improve the quality of inputs — infrastructure, materials, and teachers amongst others — to create a high-quality learning environment for all Bangladeshi children.

This sub-section provides an overview of features of the system that should be considered when developing an approach to monitoring distance education.

Education system structure

Bangladesh's general education system comprises three main sections: pre-primary, primary, and secondary (↑Wagner, et al., 2005). Pre-primary runs for one year for children aged 5 to 6. Primary runs from grades 1 to 5. Secondary education includes junior secondary (grades 6–8), secondary (grades 9–10) and higher secondary (grades 11–12).

School types

While Bangladesh has approximately 25 types of institutions delivering education services, three main types comprise the majority. These are public, private, and madrasah schools (↑World Bank Group, 2016).

- **Public schools** are overseen and delivered by two ministries. The Ministry of Mass and Primary Education (MoPME) oversees primary, while the Ministry of Education (MoE) oversees secondary and higher education. Implementation is led by the Directorate of Primary Education (DPE) and the Directorate of Secondary and Higher Education (DSHE). Of primary school learners, 75 per cent attend public schools.[11]
- **Private / NGO schools** are non-state schools. These include, but are not limited to, low-cost and / or free services for marginalised learners and high-fee private schools. Private providers deliver the majority of secondary services (88 per cent in 2019).[12] However, many private / NGO secondary schools receive government funding for teachers salaries. This means they are privately managed but publicly subsidised. Most private schools are overseen by the MoPME or the MoE, while NGO schools are overseen by the NGO Affairs Bureau.

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[11] This information is available at http://data.uis.unesco.org/
[12] This information is available at http://data.uis.unesco.org/

- **Madrasahs** provide formal Islamic religious education. They can receive government funding and / or raise money from fees or other sources. Madrasah education delivery is overseen by the Madrasah Education Board. Oversight is provided by the Technical and Madrasah Education Division of the MoE.

Key education system metrics

High enrolment levels demonstrate the demand for education in Bangladesh (↑Directorate of Primary Education, 2019). As of 2018, there were 17.3 million children enrolled in 134,147 primary schools and more than 10 million learners enrolled in more than 20,000 secondary schools (↑BANBEIS, 2018). Circa 3.5 million learners were enrolled in 106,852 pre-primary schools. A table of synthesised metrics is directly below, with key themes outlined in more detail beyond this table.

Table A1: Bangladesh education metrics (↑BANBEIS, 2018; ↑Directorate of Primary Education, 2019)

	Males	Females	Total
Pre-primary net enrolment	96.2%	92.2%	94.2%
Primary net enrolment	97.6%	98.2%	97.9%
Primary attendance	88.1%	88.6%	88.6%
Primary cycle completion	78.6%	84.3%	81.4%
Primary education completion exam pass rate	94.9%	95.4%	95.2%
Grade 5 learners achieving Bangla competencies *	11%	12%	12%
Grade 5 learners achieving math competencies *	16%	17%	17%
Transition to secondary**			95.4%
Secondary net enrolment*	63.6%	74.4%	68.8%
Secondary cycle completion / dropout rate*	64.0%/36.0%	61.6%/38.4%	62.8%/37.2%
Secondary education completion exam pass rate*	80.7%	81.7%	81.2%

* As of 2017.
** As of 2016.

Access to and completion of education

Bangladesh's net enrolment rates for both primary (97.9 per cent) and secondary (68.8 per cent) are higher than the South Asia average (87.8 per cent and 60.5 per cent) (↑World Bank, no date). Attendance levels are high in primary (88.6 per cent), and more than 80 per cent of learners complete primary education. More than 95 per cent of those who pass the primary completion exam progress to secondary education. Completion of secondary education is lower than completion of primary education. Circa 60 per cent of those who start secondary education finish the cycle.

Learning

While demand for education is high, learning is limited. The 2017 National Student Assessment (NSA) showed that in grade 5 more than 90 per cent of Bangla learners and 80 per cent of math learners do not meet learning goals. The 2015 Learning Assessment of Secondary Institutions (LASI) showed that fewer than 50 per cent of grade 8 learners were able to interpret details in texts or retrieve details from complex texts (↑BANBEIS, 2018).

Gender

The demand for education is high amongst girls. In primary, more girls (8,799,033) are enrolled in primary education in Bangladesh than boys (8,539,067). Approximately 62 per cent of teachers are female. In secondary education nearly 800,000 more girls (5,580,387) enrol than boys (4,750,308).

Reforms

Improving quality has been a major focus over the last five years. In primary, the third and fourth primary education development programs helped increase the number and quality of teachers, moved the curriculum to a competence-based approach, and enhanced the quality of teaching and learning materials (↑Sarwar, et al., 2020). The Secondary Education Development Program supports curriculum refinement, assessment enhancements, increases in learner retention and governance strengthening. [13] It also focuses on enhancing ICT usage and developing school infrastructure.

Out of school children

According to an evaluation of GPE's support to education in Bangladesh, in 2019 approximately 5.5 million children aged 6–14 years were not in school (↑Results for Development, 2020). Various programmes provide these children with access to education opportunities. The largest of these is the Reaching Out of School Children II (ROSC II) programme, which has reached approximately 690,000 out-of-school children in more than 20,000 learning centres across Bangladesh (↑World Bank Group, 2019). Additionally, the Third Primary Education Development Programme (PEDP3) supported 100,000 learners to access non-formal education (↑World Bank Group, 2018).

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[13] Information available at http://sedp.gov.bd/

Of those children currently classified as out-of-school, a large number (circa 625,000) are Rohingya refugees and other displaced populations (↑World Bank Group, 2019. Of this population, it is estimated that more than 70 per cent do not have literacy skills, let alone basic education competencies. Through the ROSC II project, the MoPME and the World Bank are attempting to address the basic education needs of 150,000 of these children in informal learning centres in the camps.

Bangladesh's education response to Covid-19

When education policy-makers declared schools would be closed on 17 March 2020, the government rapidly moved to deliver a multi-modal approach to provide learners with learning continuity. Additional resources were deployed to both strengthen existing tools and expand these offerings further.

Luckily, Bangladesh was already well-placed to respond to the emergency. Distance education has the potential to play an important role in educating Bangladeshi children as it provides a flexible solution for accessing education. One of the key reasons why children drop out of school in Bangladesh is an inability to safely and easily access services, potentially for reasons such as the lack of physical buildings in urban areas, the distance to schools in remote and rural areas, or seasonal disruptions such as floods (↑Islam & Mahmudul, 2016). Bangladesh has been strengthening its distance education offerings since 2010. In line with 'Digital Bangladesh', a government-wide project that aims to increase the availability of digital public services in the country, multiple initiatives are driving the use of technology in both delivering and overseeing education services (↑Sarwar, et al., 2020). These initiatives included, but were not limited to:

- The Konnect platform, which provides millions of learners with thousands of pieces of learning content.[14]
- The National Skills Portal, which offers content and live classes to technical and vocational students.[15]
- Muktopaath, which provides more than 1.4 million users with 180+ online courses and live classes.[16]
- Teachers Portal, which offers content and more than 1,00,000 online classes to primary and secondary level learners.[17]
- Virtual Class platform, which offers online live classes for the tertiary level students.[18]

These platforms provided a solid foundation for Bangladesh to quickly react to the school closures caused by the Covid-19 pandemic.

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[14] This information is available at http://konnect.edu.bd/
[15] This information is available at http://www.skills.gov.bd/
[16] This information is available at http://muktopaath.gov.bd/
[17] This information is available at www.teachers.gov.bd
[18] This information is available at www.virtualclass.gov.bd

The Bangladesh COVID 19 School Sector Response Project (BSSRP) outlines the country's response to school closures, which further builds on this pre-existing platform (↑Global Partnership for Education, 2020, p. 2). The plan starts by identifying the threats posed by the school closures, including:

- learning losses due to school closures;
- increased learning inequality as higher-income families have better access to distance education;
- an increase in learner dropout when learners do not return to school after reopening;
- negative impacts on health, nutrition, and hygiene;
- negative impacts on the most marginalised (female, disabled, and hard-to-reach learners);
- disruptions to non-formal education;
- an increase in youth unemployment.

Funded by the Global Partnership for Education (GPE), the BSSRP aims to align development partners in their efforts to support the response to and recovery from the education-related impacts of the Covid-19 pandemic. Implementation will be led by the DPE, who will work in close coordination with the DSHE. The project aims to "strengthen the basic school system's institutional capacity to respond to and recover from the Covid-19 crisis", and to "build resilience to face future crises from pre-primary to secondary level" (↑Global Partnership for Education, 2020, pp. 12–13). The BSSRP comprises four components:

- **Component 1: Engaging in systemic response** supports the government in implementing an immediate response to school closures during the first six months of the project and beyond.
- **Component 2: Education system recovery** supports the government in implementing a medium-term recovery strategy. It aims to support schools to prepare for learners' safe return.
- **Component 3: Building system resilience** supports the government in putting in place provisions to enable it to be prepared for, and to better react to, future shocks.
- **Component 4: Project management, Results Monitoring, and Communication** supports the government in managing and overseeing the project's implementation.

Implementation of the programme is already underway, with content being delivered to learners through multiple mediums. Figure A1 highlights the ways in which these mediums are being used to support educational continuity.

Figure A1: Bangladesh's multi-modal response to Covid-19 (↑Sarwar, et al., 2020)
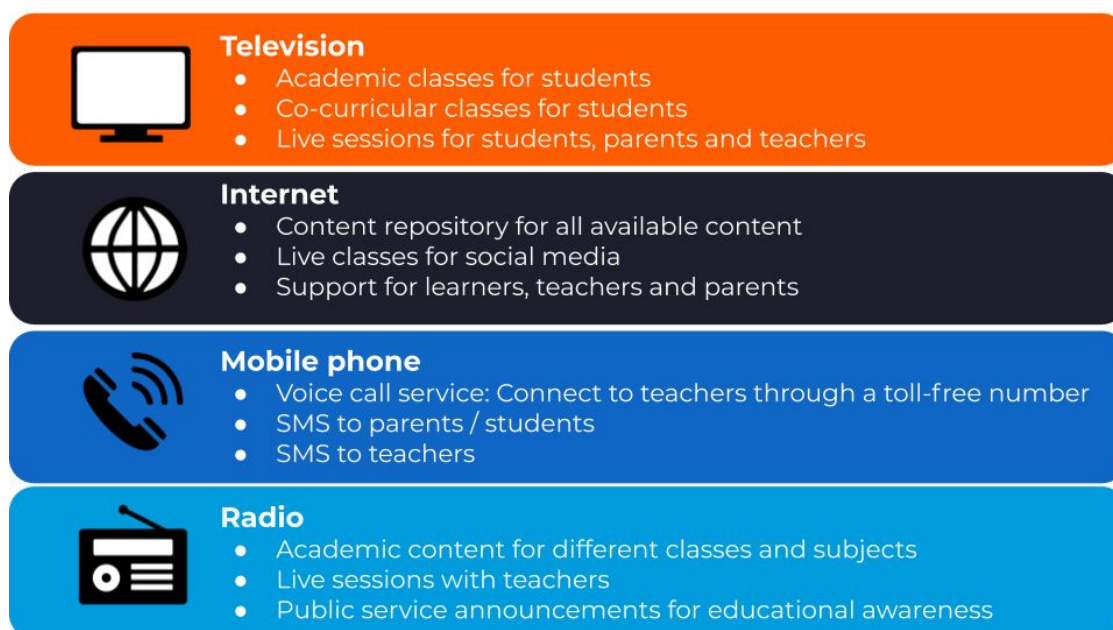
Despite the rapid response and the good progress made in providing educational continuity, challenges remain. In particular, access to devices and connectivity in Bangladesh can be problematic. Education has been delivered through television during the current school closures, but only 43.9 per cent of the rural population and 74.2 per cent of the urban population in Bangladesh own television sets. Moreover, only 37.6 per cent of people nationally have internet access (↑Bangladesh Bureau of Statistics (BBS) & UNICEF Bangladesh, 2019). In addition to these basic services, factors such as the cost of connectivity and the price of devices limit the utility of tech-based distance education in Bangladesh (↑Rogers, 2018). For example, the internet is not affordable for most of the population, with Bangladesh ranked 41st out of 66 countries surveyed in 2018, compared to regional neighbours such as Pakistan who was ranked 15th (↑Alliance for Affordable Internet & A2I Programme, no date). Similarly, while there is more widespread access to phones, with 166 million mobile phone subscriptions in Bangladesh in 2020,[19] there is an average of 1.49 SIM cards per registered user, which means that circa 50 million people do not have access to technology required for phone-based learning (↑Shadrach, 2016). Interestingly, while there are substantial obstacles to high-tech solutions for education, there is very little information on current low-tech distance education interventions in Bangladesh.

One rapid survey conducted by BRAC indicates a number of other emerging challenges. Approximately 44 per cent of learners were not receiving guidance from their schools on how to continue their studies, while 19 per cent did not receive support from their parents (↑BRAC, 2020). Additionally, the MoPME Response and Recovery Plan highlights the following ongoing challenges:

- an inability to reach all learners, particularly the most marginalised;

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[19] This information is available at
http://www.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-february-2020

- younger learners' educational needs are not well met through distance education modalities;
- a lack of experience using technology for education amongst both teachers and learners;
- resource constraints making it difficult to fund both existing and new distance approaches;
- a lack of knowledge, expertise, and mechanisms in monitoring distance education initiatives.

This brief addresses this last challenge, examining how distance education can be monitored in Bangladesh.

Annex 2: Examples of metrics for monitoring

Table 3 contains examples of metrics for monitoring availability, access, usage, and learning. This Annex contains more examples of possible metrics and methodologies to collect them. However, this list is neither exhaustive nor prescriptive. Instead, it provides suggestions on approaches and a starting point to building a monitoring framework.

Availability		
Metric	**What to collect**	**Methodologies and sources**
Number of subjects and grades with appropriate digital content covering the entire curriculum	● Data on readily available or upcoming digital content	● If government regularly adds content: monthly status and progress report from content team (↑Groeneveld, et al., 2020)
	● Data on non-governmental appropriate digital content	● Desk research ● Survey among learners
TV content for subjects or competencies	● Data on finalised TV content currently available	● Monthly TV content reporting
	● Data on non-governmental appropriate TV content	● Desk research
		● Phone survey among learners
Radio content for subjects or competencies	● Data on finalised radio content currently made available	● Monthly radio content reporting
	● Data on non-governmental appropriate radio content	● Desk research
		● Phone survey among learners

Access		
Metric	**What to collect**	**Methodologies and sources**
Learners with access to TV, radio, devices, internet	● Generic data of homes with electricity, internet, devices, a combination of these,	● GSMA Intelligence[20] ● World Bank World Development Indicators[21] ● World Bank Data Catalog[22]

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[20] This information is available at
https://data.gsmaintelligence.com/research/research/research-2018/country-overview-bangladesh
[21] This information is available at
https://databank.worldbank.org/reports.aspx?source=world-development-indicators
[22] This information is available at
https://datacatalog.worldbank.org/dataset/world-development-indicators

	TV, radio, smartphones, feature phones; disaggregated per region and socio-economic background	• UN Data for the Sustainable Development Goals[23] • UNICEF Multiple Indicator Cluster Survey[24] • Household Income Expenditure Surveys[25]
		• Bangladesh Telecommunication Regulatory Commission[26] • Bangladesh census data?
	• Data on access at home, with friends, at a community centre	• Phone surveys • School teachers visiting homes • Surveys through chain stores
Number of hard-to-reach children with learning materials	• Data on possession of materials and access to materials	• Phone surveys • School teachers visiting homes • Surveys through chain stores • NGOs active with these children
Number of children provided access to programmes and sensitisation campaigns to minimise the negative effect of the school closures	• Data on access to campaigns	• Public data on access • Phone surveys
	• Data on usage of campaign	• Phone surveys • Community informers
	• Data on understanding of campaign	• Phone assessments of child
	• Data on effect of campaign	• Baseline data on well-being • SMS-based survey (e.g., U-Report)
Number of teachers trained on remedial education, distance education, and evaluation practices	• Numbers of teachers trained per month and cumulatively	• Monthly report from Bangladesh teacher training institution

Usage		
Metric	**What to collect**	**Methodologies and sources**
Frequency and duration of usage of offline materials	• Usage data	• Phone surveys

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[23] This information is available at http://uis.unesco.org/en/country/bd
[24] This information is available at https://mics.unicef.org/
[25] This information is available at https://www.ilo.org/surveyLib/index.php/catalog/HIES
[26] This information is available at http://www.btrc.gov.bd/

Learners using radio content	• Usage data on programme(s), frequency, and duration	• Phone surveys • Statistics via private firms • Teachers • Community workers
Learners using TV content	• Usage data on programme, frequency and duration	• Phone surveys • Statistics via private firms • Teachers • Community workers
Learners using online content	• Duration and number of sessions • Nature of content viewed	• Online usage tracking

Learning		
Metric	**What to collect**	**Methodologies and sources**
Number of children whose learning was assessed to evaluate loss of learning during closures (AFR)	• Assessment data on learners using materials • Assessment data on learners not using materials • Baseline data on learners' learning prior to school closures	• Phone assessments (language skills, well-being) • SMS assessments (language skills, STEM) • Assessment drop-off at school mailbox[27]
Online learning outcomes	• Assessment data on learners using materials • Assessment data on learners not using materials • Baseline data on learner assessments prior to school closures	• Online quizzes through dedicated platform

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[27] In several regions, learners drop off their work or assessments at a drop-box at schools during Covid-19, allowing teachers to review work without physical contact.

Annex 3: Example of monitoring survey

Below, questions from a sample survey have been added based on a design by UNICEF Regional Office South Asia (↑UNICEF Regional Office for South Asia, 2020). This is intended as an example of possible questions that could be asked when monitoring distance education via survey. Any survey will be adjusted and custom-made depending on the situation on the ground and the monitoring questions that exist with the monitoring agency.

The questions below are categorised by the four components of distance education: access, usage, and learning, with well-being included. However, questions can be reordered for a more logical flow when a questionnaire is conducted and questions can be coded to provide information to different categories. The questions target either parents / caregivers or learners for learner information, and teachers. When learners are ten years or older, learners can be included in the surveys; for younger children, parents / caregivers can be targeted.

Monitoring sample questions on access

Questions for parents / caregivers on access

AP1. Are primary school-aged children in your household currently spending time on education since schools closed? **Note**: Education includes any learning activities, not just formal distance education.

1. Yes, all of them
2. Yes, most of them
3. Yes, some of them
4. No, none of them

AP2. Are secondary school-aged children in your household currently spending time on education since schools closed? **Note**: Education includes any learning activities, not just formal distance education.

1. Yes, all of them
2. Yes, most of them
3. Yes, some of them
4. No, none of them

AP3. Are there any girls between 5–17 years living in this household with you?

1. Yes
2. No

If yes:

AP4. Were the school-aged girls in this household attending school before they closed?

1. Yes
2. No

AP5. Are the school-aged girls spending time on education since schools closed?

1. Yes, all of them
2. Yes, most of them
3. Yes, some of them
4. No, none of them

AP6. Which of the following are currently present in your household?

	Radio	**TV**	**Computer or tablet**	**Regular cell phone**	**Smartphone with touchscreen**	**School textbooks**	**Special printed packs provided by the school**
Yes							
No							

AP7. Of the above, which did your child mainly use for learning during school closures? (Indicate 'none' if the child was not learning during school closures)

Select ONE option: _____

If anyone has a smartphone with a touchscreen:

AP8. How easily can your child do the following:

	Yes, my child can do this easily	**My child can do this with some difficulty**	**My child does not know how to do this**
1. Basic phone operation – opening apps, getting online			
2. Taking screenshots and pictures			
3. Send, receive, and read messages for communication purposes (SMS / WhatsApp)			
4. Use browsers to search for new information			

AP9. Compared to the boys in the household, how well can the girls use the cell phone?

1. They are more skilled than the boys in using the phone.
2. They are as skilled as the boys in using the phone.
3. They are less skilled than the boys in using the phone.

If anyone in the household has a computer or tablet:

AP10. How easily can your child do the following:

	Yes, my child can do this easily	**My child can do this with some difficulty**	**My child does not know how to do this**
1. Basic computer operation – turning it on, running software			
2. Using email to communicate			
3. Download and upload attachments			
4. Using the Internet to find resources			

AP11. Compared to the boys in the household, how well can the girls use the computer?

1. They are more skilled than the boys in computers.
2. They are as skilled as the boys in using computers.
3. They are less skilled than the boys in using computers.

AP12. Do you have Internet access?

1. Yes, reliable Internet.
2. Yes, but it is unreliable or slow or we have insufficient credit limiting usage.
3. We have no Internet.

Questions for children on access

AC1. Were you attending school before they closed because of Covid-19?

1. Yes
2. No

AC2. How many days a week were you attending school before they closed due to COVID?

1. 5 days
2. 4 days
3. 3 days
4. 2 days
5. 1 day
6. 0 day

AC3. Have you been contacted by anyone from your school since schools have been closed? (e.g., headteacher, teacher)

1. Yes
2. No

AC4. On average, over the past one week when schools have been closed, how many hours a day have you spent on education?

1. 4 or more hours per day
2. About 2 to 3 hours a day
3. About one hour a day
4. About half an hour each day
5. Currently, I am not spending any time on education

AC5. In the past week, how often have you and your teachers been in contact with each other?

1. 5 days
2. 4 days
3. 3 days
4. 2 days
5. 1 day
6. 0 day

AC6. How did the teacher and you contact each other?

1. Phone call
2. SMS
3. WhatsApp (social media platforms to be added according to country context)
4. Online platform
5. Sent a message through a community member
6. A teacher has not contacted me

AC7. Which of the following are currently present in your household?

	Radio	TV	Computer or tablet	Regular cell phone	Smartphone with touchscreen	School textbooks	Special printed packs provided by the school
Yes							
No							

AC8. Of the above, which did your child mainly use for learning during school closures? (Indicate 'none' if the child was not learning during school closures)

Select ONE option: _____

If anyone in the household has a smartphone with touchscreen

AC9. How easily can you do the following:

	Yes, I can do this easily	I can do this with some difficulty	I do not know how to do this

	Yes, I can do this easily	I can do this with some difficulty	I do not know how to do this
1. Basic phone operation – opening apps, getting online			
2. Taking screenshots and pictures			
3. Send, receive, and read messages for communication purposes (SMS/WhatsApp)			
4. Use browsers to search for new information			

If anyone in the household has a computer or tablet

AC10. How easily can you do the following:

	Yes, I can do this easily	I can do this with some difficulty	I do not know how to do this
1. Basic computer operation – turning it on, running software			
2. Using email to communicate			
3. Download and upload attachments			
4. Using the Internet to find resources			

Questions for teachers on access

AT1. Across all classes, how many learners were you teaching before schools closed?

_____

AT2. Before school closed, approximately what percentage of the learners you were teaching had any disability?

1. 0–10%
2. 10–20%
3. 20–30%
4. 30–40%
5. 40–50%
6. Above 50%

AT3. Before school closed, approximately what percentage of the learners you were teaching were girls?

1. 0–10%
2. 10–20%
3. 20–30%
4. 30–40%
5. 40–50%
6. Above 50%

AT4. Are you teaching learners right now when schools have been closed?

1. Yes
2. No

If yes:

AT5. How many learners are you teaching remotely now?

_____

AT6. To the best of your knowledge, approximately how many of the learners you are currently teaching remotely have disabilities?

1. 0–10%
2. 10–20%
3. 20–30%
4. 30–40%
5. 40–50%
6. Above 50%

AT7. To the best of your knowledge, approximately how many of the learners you are currently teaching remotely are girls?

1. 0–10%
2. 10–20%
3. 20–30%
4. 30–40%
5. 40–50%
6. Above 50%

AT8. Have you and your learners, or their parents communicated in any way since schools closed?

1. Yes
2. No

AT9. In the past week, how often have you and your learners been in contact with each other?

1. 5 days
2. 4 days
3. 3 days
4. 2 days
5. 1 day

6. 0 day

AT10. How did the learners and you contact each other?

1. Phone call
2. SMS
3. WhatsApp (social media platforms to be added according to country context)
4. Online platform
5. Sent a message through a community member
6. No learners have contacted me

AT11. In the past week, how often have you and your Principal / Head Teacher been in contact with each other?

1. 5 days
2. 4 days
3. 3 days
4. 2 days
5. 1 day
6. 0 day

AT12. How did the Principal / Head Teacher and you contact each other?

1. Phone call
2. SMS
3. WhatsApp (social media platforms to be added according to country context)
4. Online platform
5. Sent a message through a community member
6. No Principal / Head Teacher has contacted me

AT13. Do you or anyone in your household own a smartphone with a touch screen?

1. Yes
2. No

If yes:

AT14. How easily can you do the following:

	Yes, I can do this easily	I can do this with some difficulty	I do not know how to do this
1. Basic phone operation – opening apps, getting online			
2. Taking screenshots and pictures			
3. Send, receive, and read messages for communication purposes (SMS / WhatsApp)			

4. Use browsers to search for new information			

AT15. Do you or anyone in your household own a computer / laptop / tablet?

1. Yes
2. No

If yes:

ET9. How easily can you do the following:

	Yes, I can do this easily	I can do this with some difficulty	I do not know how to do this
1. Basic computer operation – turning it on, running software			
2. Using email to communicate			
3. Download and upload attachments			
4. Using the Internet to find resources			

Monitoring sample questions on usage

Questions for parents / caregivers on usage

UP1. Have you or any other adult in the household been contacted by anyone from your children's schools since schools have been closed? (e.g., headteacher, teacher)

1. Yes
2. No

UP2. In the past week, how often have your children and their teachers from school been in contact with each other?

1. 5 days
2. 4 days
3. 3 days
4. 2 days
5. 1 day
6. 0 day

UP3. How did your children and their teachers contact each other?

1. Phone call
2. SMS
3. WhatsApp (social media platforms to be added according to country context)
4. Online platform
5. Sent a message through a community member
6. A teacher has not contacted my children

UP4. Compared to your involvement in your children's education BEFORE schools closed, how much do you think you are involved in your children's education now?

1. A lot less
2. A little bit / somewhat less
3. About the same
4. A little bit / somewhat more
5. A lot more

UP5. Through which method has your child mainly been learning while schools are closed?

1. Special printed packs provided by the schools
2. Textbooks
3. Listening to educational programs broadcasted on Radio
4. Watching educational programs on TV
5. Watching educational videos online
6. Online classes provided by the school
7. Other, please specify: _____

UP6. Who in your family plays the main role in facilitating your children's learning?

1. Mother
2. Father
3. Older sibling
4. Grandparent
5. Other, please specify _____

UP7. On average, during school days when schools were closed, how many hours a day did children in the household spend on education?

1. 4 or more hours per day
2. About 2 to 3 hours a day
3. About one hour a day
4. About half an hour each day
5. They were unable to study

UP8. Choose the MAIN reason children in your household were not spending more time on education during this time while schools are closed?

1. Unable to access technology
2. Children are not feeling motivated to study
3. Children are helping at home

4. Children are working outside
5. There is no quiet place to study at home
6. Lack of access to textbooks

Questions for children on usage

UC1. How have you been learning while your schools have remained closed?

1. Printed packs from school
2. Textbooks
3. Distance education programs offered through the radio, TV or online
4. I have not been able to study
5. Through my siblings
6. Through my parents
7. Through an adult in the community

UC2. If you have been studying, who has mainly supported you with this?

1. No one, I mostly study on my own
2. Teachers
3. Parents
4. Other family members
5. Other (specify)

Questions for teachers on usage

UT1. How have you been teaching your learners during this time when schools have been closed?

1. Printed packs from school
2. School textbooks
3. Distance education programs offered through the radio, TV or online
4. I have not been able to teach

UT2. On average, over the past one week when schools have been closed, how many hours a day have you been spending on teaching?

1. More than 2 hours a day
2. About one hour a day
3. About half an hour each day
4. Currently, they are not spending any time on education

Monitoring sample questions on learning and well-being

Questions for parents / caregivers on learning and well-being

LWP1. Compared to the amount your children were learning BEFORE schools closed, how much do you think they are learning NOW?

1. A lot less
2. Little bit less / Less
3. The same amount
4. Little bit more / More

5. A lot more

LWP2. In the past 7 days, what have you been most concerned about in relation to your children?

1. Children having enough to eat
2. Children falling behind in their education
3. Children not being able to take their exams
4. Children getting sick
5. Children not spending time outdoors
6. Children spending too much time outdoors

LWP3. On a scale of 1–10, how would you rate your child's well-being / happiness at the moment (1 being the lowest and 10 being the highest)

Blank for parents ranking of child's well-being

_____

Questions for children on learning and well-being

LWC1. Compared to the amount you were learning BEFORE schools closed, how much do you think you are learning NOW?

1. A lot less
2. Little bit less / Less
3. The same amount
4. Little bit more / More
5. A lot more

LWC2. Choose 3 mains reasons why you feel you may be learning less during this time when schools are closed?

1. I am unable to access technology.
2. I am not feeling motivated to study.
3. I am helping with work at home.
4. I am working outside the home.
5. I do not have a quiet study place at home.
6. I don't have my textbooks on me.
7. I do not have any contact with teachers or anyone from school.
8. Other [Specify]

LWC3. On a scale of 1–10 how would you rate your well-being / happiness at the moment? (1 being the lowest and 10 being the highest)

Blank for child's ranking of their well-being

_____

LWC4. If the child's ranking is 5 or less, then follow-up and ask why?

Blank for child's explanation

_____

Questions for teachers on learning and well-being

LWT1. Compared to the amount your learners were learning BEFORE schools closed, how much do you think they are learning NOW?

1. A lot less
2. Little bit less / Less
3. The same amount
4. Little bit more / More
5. A lot more

LWT3. On a scale of 1–10 how would you rate your well-being / happiness at the moment? (1 being the lowest and 10 being the highest)

Blank for teacher's ranking of their well-being

_____

LWT4. If the teacher's ranking is 5 or less, then follow-up and ask why?

Blank for teacher's explanation

_____

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