

Introduction

- The COVID-19 pandemic has disrupted the education sector worldwide.
- As schools closed to prevent the spread of the virus, many students were left without access to quality education.
- In response, remote learning systems (RLS) were introduced to provide students with access to digital content.
- This presentation aims to assess the 'Reach', 'Access' and 'Usefulness' of RLS for young learners during the pandemic.

Context

- COVID-19 pandemic led school closures
 - ✓ Globally: Affected over 1.6 billion students
 - ✓ Bangladesh: Over 36 million students, including 17 million primary school students, were out of school for nearly 2 years.
- Challenges faced by students and households
 - √The closure of schools resulted in a decline in study time at home,
 further impacting student learning and retention.
 - ✓ Bangladesh's Learning Adjusted Years of Schooling (LAYS) are projected to decrease*, leading to economic losses.

Remote Learning: A New Norm with Challenges

Shift to Remote Learning in Bangladesh

- ✓ Distance learning program implemented through SANGSAD TV from 30 April 2020
- ✓ Remote learning content continued even after schools reopen
- ✓ Improved content for the primary level launched in November 2022

Access to Remote Learning: Reality Check

World Bank study on stipend recipient students of secondary level (grade 9):

- ✓86% of the students were aware of TV-based learning programs
- ✓ Only 43% had access to TV-based programs
- ✓ Only 21% had access to government-provided online learning programs
- ✓ A mere 2% chose to access them

Challenges in Remote Learning for Students

Challenges in Accessing Remote Learning

(Particularly for Students from Low-Income Families)

- ✓ Access to devices
- ✓ Availability of electricity
- ✓Internet connection
- ✓ Learning environment at home

Objectives

- Objective 1: Assessing Reach of Digital Content
 - ✓ Evaluate the extent to which on-aired digital content reached students
 - ✓ Focus on assessing the effectiveness of reaching girls and disadvantaged students
- Objective 2: Assessing Enrollment Status of Students
 - ✓ Determine the number of children in primary schools who returned to school after COVID-19
- Objective 3: Assessing Effectiveness of Remote Learning
 - ✓ Evaluate the effectiveness of the Remote Learning System in providing access to quality education during school closures
- Objective 4: Supporting Evidence-Based Planning
 - ✓ Using study findings to plan and design an inclusive remote learning system for the education sector

Literature Review

Global Impact, Institutional Reopening, Role of Internet, and Multinational Lessons

Research Focus	Key Findings	Reference
Impact of the Global Pandemic	 Impacted 87.1% of world's total enrolled learners - 165 country-wide school closures 	ECW, 2020
Reopening Educational Institutions	 Need to prevent growing inequalities Importance of ensuring the quality of education - Increased priority for distance learning preparation 	UNESCO, 2020
Role of Internet and Distance Education	 Internet accessibility and ease of utilization crucial for education delivery Emergence of distance education as a prominent solution Diverse tools utilized: radio, TV, mobile phones, online teaching, paper and pencils 	INEE, 2020a
Lessons from Multi- Country Analysis	 Adaptation of different techniques in distance learning across continents and countries Benefits for South Asian countries from multimodal strategies and usage of TV & online platforms Positive impact of teaching and guiding parents and caregivers for athome learning 	WB, 2021

Literature Review (Cont.)

Research Focus	Key Findings	Reference
Long-standing Concept of Distance	 Distance learning has long been advocated for remote and vulnerable groups. Stability, improved access, and equity are key benefits of distance learning. In Bangladesh, distance learning benefits students and teachers in disaster-prone and isolated areas. 	Ahmad & Noman, (2015); Roy & Sattar, (2015); Parvin (2017)
Impediments to Distance Learning	 In low- and middle-income nations, lack of high-speed broadband and digital devices limit online learning opportunities. Limited access to high-speed broadband and digital devices pose challenges for distance learning. Poor telecommunications, digital literacy, and limited multimedia devices impede distance learning in Bangladesh. 	World Bank, 2020
	 Teachers, students, and guardians express unease with distance learning, preferring traditional face-to-face education. 	Aktaruzzaman, 2014
	 Technical knowledge gaps and psychological inertia among teachers and students hinder distance learning. 	(Shariar, 2021)

Research Approach

Analysis Focus

- ✓ Access to and effectiveness of distance learning systems
- ✓ Consider factors such as geographic locations, remoteness, gender, and parental background

Data Collection: Questionnaires

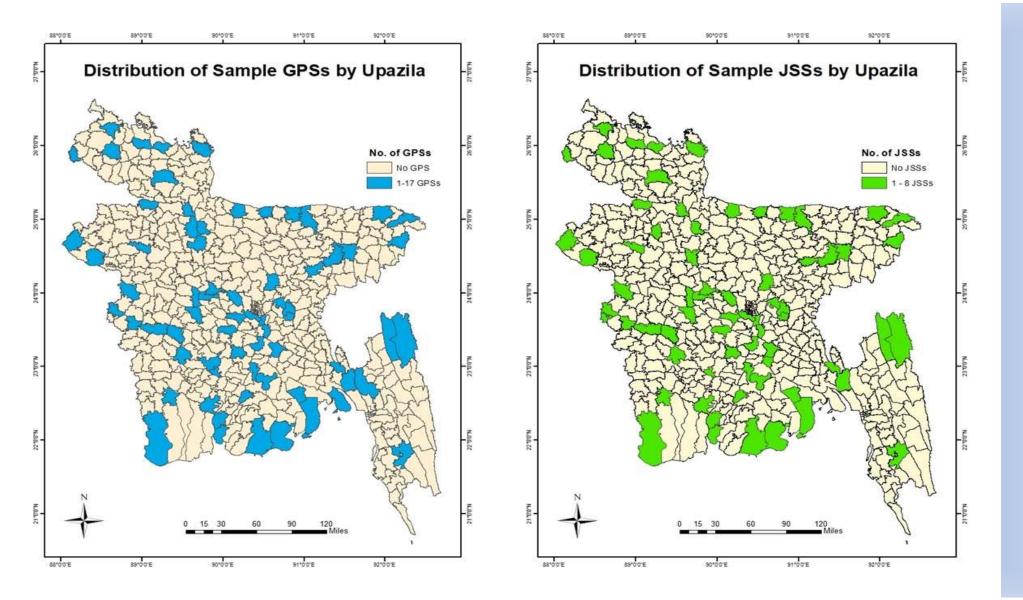
- ✓ Tailored questionnaires designed for students, head teachers, and other teachers
- ✓ Questionnaires aim to gauge perceptions, experiences, and challenges in distance learning
- ✓ Additional one-page questionnaire to collect data on enrollment, attendance, and basic school amenities

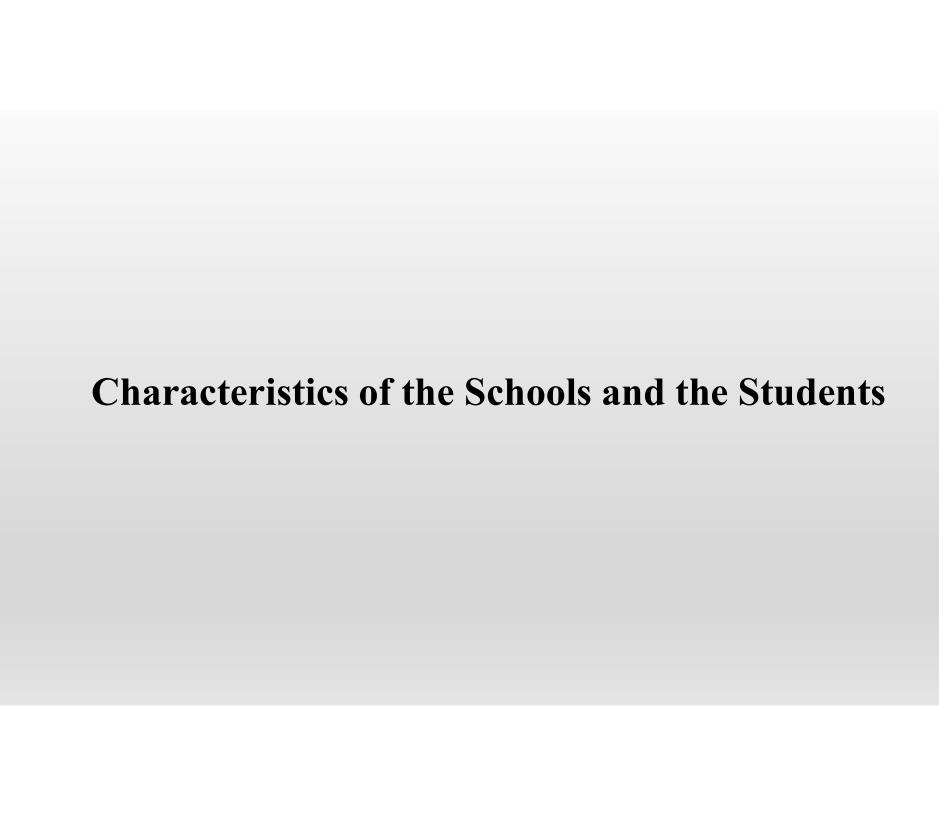
Social and Household Information

- ✓ Relevant social and household information of students
- ✓ Data collected directly from students and/or their parents

Sample Selection

- Primary data have been collected from 1,600 schools across
 72 Upazilas drawn from 63 districts of Bangladesh.
- Interviewed: 48,000 students, 1600 head teachers, and 4800 other teachers from 1600 schools.
- Considering Resource and time constraints, two alternative data collection approaches were adopted-
 - First approach (GPS students): one-on-one basis as they are young children; and,
 - Second approach (JSS students and teachers): Self-administration but under the direct supervision of trained field officers.





Sample Distribution of Schools

Location	GPSs		JSSs		Total	
	N	%	N	%	N	%
Rural	749	71.1	358	64.6	1,101	68.9
Urban	52	5.0	96	17.3	148	9.3
Char	95	9.1	16	2.9	111	7.0
Hilly	39	3.7	25	4.5	64	4.0
Coastal	84	8.1	30	5.4	114	7.1
Haor	31	3.0	29	5.2	60	3.8
All	1,050	100.0	554	100.0	1,598	100.0

Facilities in the Schools

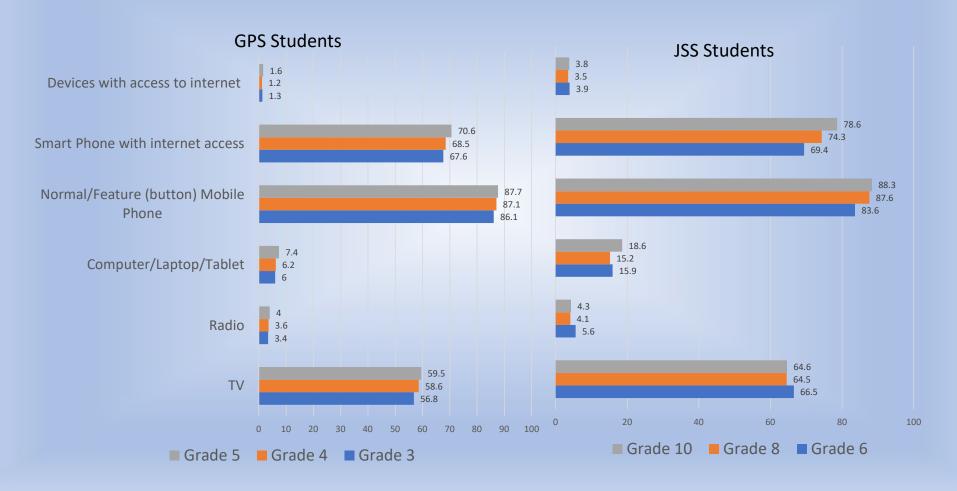
Type of facilities	GPSs		JSSs		Total	
	N	%	N	%	N	%
Play Ground	861	82.4	527	95.0	1,388	86.8
Library	604	58.2	514	92.6	1,118	70.2
Computer	135	13.0	357	64.4	492	30.9
Drinking Water	920	88.2	534	96.4	1,454	91.1
Separate toilet for Girls	677	65.1	506	93.2	1,183	74.7

Change in Enrollment before and after Covid

Class		% Change (Jan22- Jan20)		% Change (Jan22- Jan21)		
	Boys	Girls	Total	Boys	Girls	Total
Class-1	-14.29	-14.29	-14.29	-10.00	-14.29	-12.20
Class-2	-9.52	-4.55	-6.98	-13.64	-4.55	-9.09
Class-3	-9.09	-8.70	-8.89	-9.09	-8.70	-8.89
Class-4	0.00	-4.55	-2.38	-9.09	-12.50	-10.87
Class-5	11.76	10.00	10.81	-5.00	-4.35	-4.65
All	-6.90	-7.20	-7.05	-10.00	-9.38	-9.68

Access and Effectiveness of Remote Learning System: Response of the Students

Ownership of electronic devices



Time Spent Watching Educational Programs on TV

	GPS Stud	ent	JSS Stud	dents
Time duration	When schools were	In last 2	When schools	In last 2 weeks
	closed	weeks	were closed	N (%)
	N (%)	N (%)	N (%)	
No time spent	24,163	28,491	10,271	14,861
	(74.9)	(88.7)	(56.7)	(82.6)
0-30 min	2,754	1,488	1,833	974
	(8.5)	(4.6)	(10.1)	(5.4)
30-less than hour	3,145	1,315	2,936	906
	(9.8)	(4.1)	(16.2)	(5.0)
1 hour to less than 2	1,688	593	1,729	547
hours	(5.2)	(1.9)	(9.6)	(3.0)
2 hours to less than 3	408	118	753	299
hours	(1.3)	(0.4)	(4.2)	(1.7)
3 hours to less than 4	75	49	367	155
hours	(0.2)	(0.2)	(2.0)	(0.9)
4 hours or more	32	81	223	247
	(0.1)	(0.3)	(1.2)	(1.4)

Access and use of RLS by Background Characteristics of Students: Mothers Education

Mother's Education Level	Percentage of Students Not spending time watching educational programs on TV		
	GPS	JSS	
Cannot read or write/ never went to	82.1	64.9	
school			
Below primary	78.9	63.9	
Below secondary	74.3	61.8	
Below Higher Secondary	67.9	50.0	
Higher secondary and above	62.0	39.9	

Access and use of RLS by Background Characteristics of Students: Location of schools

Location of school	spending time watching educational programs on TV		Distance of the school from upazila	Percentage of Students Not spending time watching educational programs on TV	
	GPS	JSS	sadar		
Rural	73.2	58.3		GPS	JSS
Urban	62.8	40.2	Land the section	0.0	300
Char	79.0	63.1	Less than 5 km	73.2	45.5
Hilly	82.4	68.0	6-10 Km	74.3	60.9
Coastal	84.3	65.2		74.5	60.9
Haor	89.7	71.3	10 above	76.1	64.4

Access and use of RLS by Background Characteristics of Students: Family Income

Family Income	Percentage of Students Not spending time watching educational programs on TV		
	GPS	JSS	
Below 10,000	75.4	62.2	
10,000-20,000	74.9	57.8	
20,000-40,000	68.0	46.3	
Above 40,000	62.8	44.4	

Usefulness of Remote Learning

	GPS Students			JSS Students		
Statement	When schools were closed	In the last 2 weeks	When schools were closed	In the last 2 weeks		
It is very supportive/useful	33.3	33.1	39.4	38.1		
It is somewhat supportive/useful	57.2	56.0	53.7	48.4		
It is neither supportive nor useful	5.8	5.7	2.3	5.0		
It is somewhat unhelpful	3.1	4.2	3.3	5.4		
It is very unhelpful	0.7	1.0	1.3	3.1		

Ease of Understanding the Remote Learning Contents

	GPS Stud	lents	JSS Students		
Ease of understanding	When schools were closed	In the last 2 weeks	When schools were closed	In the last 2 weeks	
Extremely easy	36.1	37.0	43.3	38.7	
Quite easy	47.6	46.5	39.4	39.6	
Somewhat easy	8.3	8.8	12.0	13.0	
Not easy	5.6	4.0	3.2	5.1	
Not easy at all	2.5	3.7	2.1	3.7	

Access and Effectiveness of Remote Learning System: Response of the Head-Teachers

Sample Distribution of Head Teachers

Sample Coverage	GPS	JSS
Head Teachers interviewed	1050	555
Gender		
Male	651 (62.0)	513 (92.43)
(N, %)		
Female	399 (38.0)	42 (7.57)
(N, %)		
Districts	63	63
Upazilas	71	72
Avg. distance from nearest	12.88	10.77
upazila Sadar (in k.m.)		

Involvement of Teachers in Remote Learning Activities (reported by Head Teachers)

Period	GPS	JSS
March 2020 – September 2021 (Schools were fully closed)	96.2	92.6
September 2021 – January 2022 (Schools partially reopened)	98.8	97.7
January 2022 – March 2022 (Schools fully closed again)	95.5	88.8
Post March 2022 (Schools reopened again)	97.1	95.0

Types of Involvement with Educational Activities

Engagement type	GPS	JSS
Online/internet classes provided by the school	19.8	25.0
Recording lessons on television/radio/online	10.2	12.8
Face-to-face tutoring	12.9	9.6
Guiding over the phone	27.3	24.3
Providing assignment	27.5	27.2
Others	2.3	1.2

Opinions of Head Teachers about the Effectiveness of the Remote Learning Platforms

Effectiveness of various mediums for remote learning

Effective remote learning platforms for hard-to-reach/low-income households

Devices	GPS	JSS	Devices	GPS	JSS
TV	54.0	44.1	TV	58.2	75.4
Radio	1.4	1.5	Radio	21.5	28.5
Online/mobile/digital platform	39.5	52.1	Online/mobile/digital		
None	3.1	2.0	platform	34.8	42.2
Others	2.1	0.4	Physical Learning Package	71.3	46.9

Extent of Learning Compared to In-Person Classes

Opinion	GPS	JSS
Learned much less	3.2	2.0
Learned somewhat less	93.6	95.3
Learned same	2.6	1.5
Learned more	0.4	0.9
Learned much more	-	0.4

Preferred Method of Learning Modality

Learning modality	GPS	JSS
Only classroom-based (in-person classes)	38.4	28.1
Only remote learning	0.8	0.7
Blended learning (both in-person and remote) modality	60.4	71.2

Access and Effectiveness of Remote Learning System: Response of the Teachers

Sample Distribution of Teachers

Sample Coverage	GPS	JSS
No. of Teachers interviewed	3110	1371
Gender		
Male (N, %)	1141 (36.69)	1017 (74.18)
Female (N, %)	1966 (63.22)	353 (25.75)

Opinions of Teachers about the Effectiveness of the Remote Learning Platforms

Effectiveness of various mediums for remote learning

Effective remote learning platforms for hard-to-reach/low-income households

Devices	GPS	JSS
TV	48.5	44.3
Radio	1.1	0.3
Online/mobile/digital platform	46.6	52.9
Others	3.8	0.4

Devices	GPS	JSS
TV	62.8	80.0
Radio	24.1	35.9
Online/mobile/digital platform	27.9	41.4
Physical Learning Package	49.0	51.8

Extent of Learning Compared to In-Person Classes

Opinion	GPS	JSS
Learning much less	2.1	1.8
Learning somewhat less	94.5	93.8
Learning about the same	2.5	2.6
Learning more	0.6	1.2
Learning much more	0.2	0.4

Preferred Method of Learning Modality

Learning modality	GPS	JSS
Only classroom based (inperson)	37.0	19.2
Only remote learning	0.6	0.8
Blended learning (both in- person and remote) modality	62.4	79.7

Conclusion

- Access to the remote learning systems by the students was minimum.
- Students at the secondary level had relatively higher access compared to that of the primary students
- Those who could access the system, benefited from it
- Though students learned much less than what they usually learn from in-person classes but both
 the students and teachers supported the remote learning systems alongside in-person classes
 (i.e., the blended learning approach).
- RLS needs major improvements in terms of contents, communication and delivery.

