



Bridge School Evaluation

REPORT



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BRIDGE SCHOOL EVALUATION: FINAL REPORT

March 2022

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DISCLAIMER

This study was conducted at the request of the BRAC Education Programme.

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The views, opinions, recommendations, and conclusions are the responsibility of the evaluation team; they are not necessarily shared by the BRAC Education Programme.

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Cover Photo © BRAC: Jesmin Akhter, a Grade 5 teacher at a bridge school in Savar, Bangladesh is conducting her class by mobile phone. © BRAC

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FOREWORD

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THIS REPORT REFLECTS OUR WORK over the previous nine months. We have benefited greatly from the high degree of cooperation with BRAC and Bridge staff at all levels. They have been generous with their time and have supplied us with numerous documents and reports to make our task easier and more accurate.

It has been a truly rewarding experience working with BRAC Education Programme colleagues at BRAC head quarters in Dhaka as well as in the field. A special thanks to BEP's senior management for sharing their institutional memory of BEP over three decades. The discussions with them were enlightening and informative. Our task would have been impossible without their support. Their depth of knowledge about the programme has helped us understand the logic behind the innovative approaches that BEP designed and implemented. The material development team, assessment and evaluation team, monitoring and evaluation, and the field implementation team were always there to share information whenever needed.

This study would have been impossible without the support from Bridge School teachers, students, and their

parents. The parents and caregivers gave an enormous amount of time during the household survey to respond to a very long questionnaire - and their children participated in the reading and math tests. Thank you.

Development partners, civil society representatives, think tanks, academia, and senior officials from the Directorate of Primary Education, and the Bureau of Non-Formal Education of the Ministry of Primary and Mass Education of the Government of Bangladesh spared their valuable time from their busy schedules to discuss the political economy of education and development trajectory in length. Thank you.

We are grateful for the opportunity to work for BRAC and believe we can be of help to BRAC during this time of challenge.

Stephen Heyneman
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ACRONYMS

APSC	Annual Primary School Census
ASER	Annual Status of Education Report
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
DPE	Directorate of Primary Education
EAC	Educate A Child
EFA	Education for All
FCDO	Foreign, Commonwealth and Development Office (UK)
GAC	Global Affairs Canada
GDP	Gross Domestic Product
GOB	Government of Bangladesh
IJED	International Journal of Educational Development
JSC	Junior Secondary Certificate
MDG	Millennium Development Goal
NCTB	National Curriculum and Textbook Board
NER	Net Enrollment Rate
NFP (NFPE)	Non-Formal Primary (Non-Formal Primary Education)
NGO	Non-Governmental Organization
NSA	National Student Assessment
ODA	Official Development Assistance
OECD	Organization for Economic Cooperation and Development
OOSCY	Out of School Children and Youth
PECE	Primary Education Completion Examination
SDG	Sustainable Development Goal
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
US	United States
WB	World Bank



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EXECUTIVE SUMMARY

THE BRIDGE PROGRAMME has successfully enabled students, who have been away from school to re-enter and complete the primary school cycle 20% faster than the normal cycle from Grade 1 to 5. Bridge has been able to do this during the pandemic, in which face-to-face learning in schools was not allowed. Schools in Bangladesh were closed more days than, for example, schools in Madagascar, Nepal, Liberia, and Afghanistan (UNICEF, 2021-22, p.6).

There are many important learning goals beyond reading and numeracy – goals such as learning social values and basic scientific ideas, studying the country’s geography and history. However, the ability of students to read and write the major regional language and per-

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A major component of our evaluation of the Bridge project is an assessment of learning outcomes. Using a modified version of the ASER-India protocol applied to its large-scale biannual surveys, we surveyed a sample of 1600 students, in Grades 4 and 5, most in BRAC Bridge schools, a minority in regular BRAC non-formal primary schools. To our knowledge, this is the first nation-wide assessment survey conducted in Bangladesh using a protocol that permits comparison with primary cohort children elsewhere in South Asia.

In South Asia, ASER has become the most widely respected assessment protocol for evaluating early primary school learning. ASER undertakes surveying in students’ homes. Relative to classroom assessments (such as the National Student Assessment in Bangladesh), at-home surveying enables a much better understanding of children’s families and teacher/family relations in student learning.

We have summarized the learning outcomes from the Bridge survey in the table below. For both reading ability

Learning Outcomes, BRAC Bridge Survey						
Distributions of reading outcomes, by ASER categories						
	Not able to identify letters	Able to identify letters	Able to identify words	Able to read paragraph	Able to read story	Total
BRIDGE	Percent					
Class 4 (n=351)	3.1	4.3	28.5	14.8	49.3	100.0
Class 5 (n=1,174)	1.4	6.0	20.2	19.4	53.1	100.0
NON-BRIDGE NFP	Percent					
Class 4 (n=71)	1.4	0.0	29.6	26.8	42.3	100.0
Distributions of arithmetic outcomes, by ASER categories						
	Not able to identify single digit numbers	Able to identify single digit numbers	Able to identify two digit numbers	Able to do two digit subtraction	Able to do division	Total
BRIDGE	Percent					
Class 4 (n=351)	1.4	5.7	22.8	22.8	47.3	100.0
Class 5 (n=1,174)	0.6	5.5	15.1	15.8	63.0	100.0
NON-BRIDGE NFP	Percent					
Class 4 (n=71)	0.0	2.8	14.1	23.9	59.2	100.0

Source: Bridge survey, November 2021

Note: The statistics reported are the highest level at which students responded successfully. For example, in Class 5, 53.1% of students sampled successfully read the story, and were able to respond successfully to all lower levels. 19.4% read the paragraph, but not the story. Hence, 72.5% (= 19.4% + 53.1%) were able to read the paragraph. Similarly, in Class 5, 63.0% were able to solve division problems; 15.8% were able to do two-digit subtraction (with carry-over) but not division. Hence, 78.8% (= 63.0% + 15.8%) were able to do subtraction.

and arithmetic, we present ASER distributions. Nearly three quarters of respondents are in Grade 5 Bridge schools (n=1174). We also report results for Grade 4 students in Bridge schools (n=351) and in standard non-Bridge NFP schools (n=71). At this stage in the Bridge Programme, all students are in Grade 4 or 5.

Based on our survey results, Grade 5 Bridge students out-perform the 2018 pre-pandemic all-India Grade 5 averages in reading the story and doing division. ASER disaggregates results in government and non-government schools. (Students not in government schools attend a wide range of schools, the majority in “low fee” private schools.) Bridge students clearly outperform Indian government school students: 44.2% in government schools could read the story and only 22.7% could do division. Admittedly, Indian students in non-government schools out-perform Bridge students in reading the story (65.1%), but not in doing division (39.8%). We have no precise benchmark for Bangladeshi students in government and non-government schools. Exploiting indirect evidence, we conclude that Bangladesh government and non-government school results are similar to those in India.

In comparing Bridge results with either Indian ASER results or Bangladeshi results from other schools, there are three important qualifications:

- **COVID LEARNING LOSS:** The ASER all-India survey was conducted in 2018, prior to onset of the COVID pandemic and attendant learning losses among students. By contrast, we evaluated Bridge students in November 2021, 20 months into the pandemic. Over most of this period, Bridge schools have been closed. Bridge continued teaching by frequent teacher contact with families and communication with parents via “dumb” phones.
- **DISRUPTION OF STUDENT PRIMARY SCHOOL HISTORY:** Many Bridge students initially attended a non-BRAC school, and dropped out. For other students, Bridge has provided an option enabling students who had never enrolled to enter into a primary school and “catch up” via intensive teaching.
- **LOW-INCOME FAMILIES:** Bridge students come from low-income families. Not surprising, the proportion of parents able to read and write is low.

Why are Bridge schools succeeding? The relative success of the Bridge Programme is that each of five crucial school elements is contributing to successful outcomes:

- **CURRICULUM AND MATERIALS:** In both arithmetic and reading the Bridge curriculum has been truncated to fit a pupil with more motivation, diligence and need for instantaneous evidence of progress. Curricular materials have been re-designed, and concentrate on skill routines necessary for progress.
- **TEACHERS:** Bridge teachers, all female, are drawn from those who have achieved higher secondary education (HSC) but who may be under- or unemployed. The Bridge decision to design a two-week intensive programme of teacher training, paired with consistent upgrading and intense supervision, has proven to be more than adequate. Monthly refresher training is followed by regular monitoring visits by school supervisors. Bridge teachers are highly motivated. Their remuneration is low, about one sixth that of a beginning government primary school teacher. Bridge teachers feel honoured by having the chance to perform a needed and prestigious community role. They would like a larger salary, but are comfortable with their opportunities and the social appreciation they deservedly receive.
- **DAILY MONITORING AND EVALUATION:** Student lessons are assessed daily. In addition, there are weekly and a summative assessment at the end of each month. The latter is systematically reported and discussed. The supervision mandate and techniques help the modestly educated Bridge school teachers maintain minimum standards. These standards include the presentation and mastery of all required

The cognitive effect of dropping out and being pushed out is identical. It seems sensible for other school systems to assess how Bridge offset these effects.

lessons, with none skipped (as is common in other school systems). Bridge teachers know what they are teaching and why each lesson is important. Bridge Programme Managers are well respected, by both teachers and parents.

- **STUDENTS:** Behind every successful school and school system lies one determining factor and that is the students. Many characteristics influence a student's achievement - health, family resources, influence of peers, natural aptitude. But above all is the student's desire to learn, the willingness to struggle in a classroom, the enthusiasm about sacrificing other interests. About Bridge students, two things are immediately obvious. The first is poverty in family resources; the second is that students exhibit a high and uniform desire to learn.
- **FAMILIES:** Necessary for the success of the Bridge Programme is support from parents and families. A large part of the parental support involves the connection between teacher and parents. When asked 'how often does the teacher contact you', 81% of parents stated that they have contact with the teacher either daily or weekly. By comparison to other school systems, whether in high or low-income countries, this level of teacher/parent contact is unprecedented.

Conclusion

Bridge has reduced the detrimental cognitive effects of being away from school for an extended period of time. The question arises, do the reasons for Bridge's success hold potential for adjustment in other countries re-opening their respective school systems. The cognitive effect of dropping out and being pushed out is identical. It seems sensible for other school systems to assess how Bridge offset these effects. They too could provide opportunities for their students to catch up before being re-integrated into their former grade. The lessons from Bridge are discussed in some detail in Chapter 9.



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CHAPTER ONE OVERVIEW

The Bridge school evaluation team engaged by BRAC has been working for approximately nine months - from June 2021 to February 2022. This final report summarizes work undertaken.

- **CHAPTER 2** describes in some detail the Bridge school programme.
- **IN CHAPTER 3** we summarize the published literature on school dropouts including the literature relevant to other programmes that may parallel Bridge by identifying children who have dropped out of school and retraining them so that they may re-enter the class that they left several years earlier. We find only one past precedent. This suggests that the Bridge Programme may well be unique.
- **CHAPTER 4** summarizes major BRAC reports on Bridge activities.
- **CHAPTER 5** discusses the methodology employed in the evaluation.
- **CHAPTER 6** analyzes the reading and arithmetic survey results in a manner consistent with ASER-India reports. It explores underlying factors based on the survey questions on family characteristics and family/teacher interaction, and introduces several political economy dimensions. It includes a regression appendix.
- **CHAPTER 7** is a synthesis of reasons why Bridge has succeeded.
- **CHAPTER 8** discusses academic and development agency perspectives on the financial stability of the Bridge Programme.
- **CHAPTER 9** contains our recommendations. These are directed to several agencies: i) to BRAC; ii) to Qatar Educate a Child Foundation; iii) to the Government of Bangladesh; iv) to development assistance agencies.
- **APPENDIX 1** provides tables summarizing all questions in the survey, other than the questions pursuing ability to read and do division. Appendix 2 provides data from regression analysis. Appendix 3 is the questionnaire used by surveyors.
- **REFERENCES** are collected at the end of the report.



CHAPTER TWO BRIDGE SCHOOL PROGRAMME

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Background

BRAC HAS BEEN complementing government's efforts for educating all eligible children in Bangladesh for over three decades. Its education programme has evolved over time to cater the needs of the children as well as the needs of the country. A modest beginning with an adult literacy programme quickly turned into a Non-Formal Primary Education (NFPE) programme by popular demand of the adult literacy programme participants. Later on, NFPE programme expanded both vertically and horizontally. Vertical expansion is in both directions—pre-primary and post primary. Pre-primary prepares children for school so that they can start formal primary school at the standard age for enrollment. Post-primary is mainly life skill education and training that the formal secondary education curriculum would otherwise not capture. These initiatives have contributed significantly to government's commitment

ment for Education for All. Despite all initiatives, dropout became one of the biggest barriers of achieving universal primary education. BRAC's Bridge school initiative is a unique programme that targets school dropouts and helps them to complete the full primary education cycle. The programme is jointly funded (50% each) by Educate A Child, Qatar and BRAC.

The first 1000 days in school are crucial for a child to develop reading and mathematics skills. These are foundational skills necessary for children to excel in other subjects and in upper grades after the first 1,000 days (in Grade 4 and higher). Due to the lack of foundational skills, many children drop out from school without completing the full cycle of primary education. Lewin and Little (2011) identify this as the third zone¹ of

¹ Lewin and colleagues (2011) identified seven zones of exclusion in primary and secondary school in sub-Saharan Africa and South Asia of which three zones fall under primary. BRAC's interventions in primary education in Bangladesh address all three zones of exclusions.

exclusion. Over three decades, BRAC has been offering basic education to Bangladeshi children who were never enrolled or dropped out from the primary school before completing the full cycle. BRAC's Non-Formal Primary Education (NFPE) is a globally recognized non-formal one-teacher, one-classroom school system, with schools conveniently located in local communities. Capitalizing on the NFPE school, BRAC also pioneered pre-primary education to prepare children for school. The objective of this pre-primary education intervention is to support the Government of Bangladesh (GOB) in achieving United Nations' (UN) Millennium Development Goal 2 (achieve universal primary education by 2015). A concerted effort by the Government of Bangladesh, development partners, multilateral and bilateral donors, civil society organizations, and non-governmental organizations (NGO) helped Bangladesh reach over 98% net enrollment rate (NER) in primary school.

MDG2 aimed at bringing more children into school. Bangladesh can take pride for bringing almost all children into school. However, the completion rate is not satisfactory. Over 20% of children who enroll in primary school drop out before completing a full five-year cycle of primary education. The UN's Sustainable Development Goal 4 (SDG4.1) requires countries to ensure primary and secondary education with quality and equity. BRAC's Bridge schools can play a vital role in complementing governments and development partners' endeavor in achieving SDG4 by 2030. At present, after passage of nearly half the 2015-30 period, realizing SDG4 goals seems unfortunately impossible. The dropout at secondary education in Bangladesh makes the SDG4 goal even harder to achieve because over one third of secondary students leave high school without finishing (BANBEIS, 2018). Globally, the learning loss due to the COVID pandemic threatens lowering students' achievements, leading to higher dropout rates. This dynamic makes interventions like Bridge more relevant now than in the past.

What is a Bridge school?

Bridge School Programme is a BRAC intervention for children who dropped out from formal school at an early grade (Grades 2 or 3). It bridges between the grades that a child had partially completed and enables students to resume their schooling. The BRAC Education Programme offers a bridging course to a selected group of children to

The BRAC Education Programme offers a bridging course to a selected group of children to resume their school at the same or one grade higher than the grade at which they dropped out.

resume their school at the same or one grade higher than the grade at which they dropped out. In principle, Bridge does not admit students who failed to completed Grade 1 or dropped out in Grade 4 or 5. However, a sizeable share of children in Bridge schools had never enrolled in any school (Q47).² Bridge has enabled these children to complete the primary cycle. Otherwise, they would probably have undertaken no formal education. The programme begins with a four-month intensive course for a cohort of 25-35 children. At Bridge school, a child completes the full primary education cycle in 36 months if beginning in Grade 3 or 40 months if beginning in Grade 2.³

Bangladesh experienced a large influx of students in primary and secondary schools after introduction of Primary Education (compulsory) Act, 1990 (GOB, 1990). Simultaneously, two interventions contributed to this higher rate of school enrollment. The Female Secondary School Assistance Project to bring more girls into secondary school commenced in 1993, and Food for Education provided an additional incentive for children to attend school. International education projects (e.g., Education for All) and national campaigns against illiteracy also motivated parents to send their children to school.

During the 1990s, school enrollment rates increased dramatically and reached about 90% by the year 2000. However, prior to imposition of the mandatory Primary Education Completion Exam (PECE) in 2009, only half the students originally enrolled in government schools completed the primary cycle. Imposition of PECE increased primary completion rates from about 50% pre-2009 to about 80% by 2013, which leaves the dropout rate over the primary cycle still around 20%. Furthermore, introduction of the PECE probably lowered average

² In the survey, we posed detailed questions about family characteristics and teacher/family interaction. We provide summary results for the 1174 students in Bridge Grade 5 schools in Appendix 1. In our survey, the majority of students sampled had not entered a primary school prior to Bridge (Q47).

³ Primary education in Bangladesh is up to Grade 5. A child who enters a Bridge school at Grade 3 requires an additional 36 months to complete. A child who enters at Grade 2 requires an additional 40 months. See Table 1.

learning outcomes among graduating students (Nath, 2015; Islam, 2016). Primary school-age children can be categorized into four groups:

- passed PECE with basic pass;⁴
- passed PECE with higher grade above basic pass;
- dropped out from school before completing the full five years of primary education cycle;
- never enrolled in school

Historically, BRAC has been known for its non-formal primary education (popularly known as NFPE) that offered a second chance to children who did not complete Grade 5 on time.⁵ In 1985, Sir Fazle Hasan Abed launched NFPE schools by popular demand from adults participating in other BRAC programmes. NFPE schools offered a full five years of primary education curriculum in four years of instruction. On average, NFPE students entered at an older age than government school students. The goal of NFPE has been to increase the primary school completion rate of children who are from disadvantage communities. The Bridge school programme is designed to target the third group of children as listed above.

Bangladesh has made significant improvements in school enrollment rates over the last three decades. Since the nationalization of primary schools in Bangladesh in 1973, public schools have been the largest provider of elementary education in Bangladesh. The Government of Bangladesh (GOB) through the Directorate of Primary Education (DPE) directly manages 65,620 schools and offers some management oversight over an additional 63,638 primary schools or education centres (APSC, 2019). Over the last two decades, kindergarten schools (non-government school that emphasize English language) have dramatically increased in number and enroll a large share of children in families that can afford tuition fees and relevant expenses (CAMPE, 2015, p. 11). In urban areas, where accessibility is not an issue, two factors influence the family's selection of the type of school a child attends: the family's income and parents' past educational attainment. In rural areas, public schools may be the best and least expensive option; in urban and semi-urban municipalities, public schools are not, with a few exceptions, a preferred option. However, public school or madrassas (religious schools) can be the only viable option among children of families in the lowest income strata. Public

and other types of formal school do not cater to the needs of children who, often for agricultural reasons, could not enroll in school in conformance with the national fixed schedule, or who had dropped out but later desired to return to school. Public schools do not prevent anyone from returning to school or enrolling at an older age. In essence, the public system raises no formal prohibitions against children returning to school after dropping out, but nor does it shift its schedule and teaching strategy to welcome them.

What makes Bridge unique?

Information we have collected suggests several reasons why children may be reluctant to return to school. Typically, children may be engaged in generating income on which their families depend. In addition, the family may have migrated to other parts of the country where income-generating opportunities are more likely to be found. Many children may be among families displaced by natural disasters - floods, cyclones, or social unrest. Some are slow learners who could not keep pace with their peers and need individual attention, which a public system does not provide due to its built-in challenges. The Bridge Programme identifies disadvantaged children and conducts a two-pronged assessment of them. The initial assessment is basically a 'scoping' (overview) survey. Information is collected from parents, communities, and children themselves, to determine if there are enough children in a geographic location to warrant a school, and whether the school should start at Grade 2 or 3.

Depending on the distribution of grade at which the majority left school, Bridge determines the appropriate grade for a community to launch a cohort of 25 students required for a particular school to open. Once the starting grade is identified, Bridge applies a grade-specific rigorous reading (mother tongue), mathematics, and English test to measure students' understanding and skills in these three subjects of the corresponding grade. In consultation with its partner, Educate A Child (EAC), BRAC agreed to open only one specific grade in a given cohort to maximize efficient use of resources and reduce implementation challenges that would arise if multiple Grade 2 and 3 schools were launched at the same time. Students in a cohort go through an intensive teaching, learning, and continuous pupil assessment process to master the skills that they were supposed to have mastered at the grade from which they

⁴ A student needs to score 33% to successfully pass any subject.

⁵ Officially, a child is supposed to enroll in Grade 1 when six years old.

Globally, UNESCO Institute of Statistics reported that 617 million children and adolescents do not achieve minimum proficiency level in reading and mathematics. Over 80% of these children without the foundational skills (reading and math) are living in low- and lower-middle income countries (UNESCO, 2018).

had dropped out. Additionally, the children take monthly tests and gradually complete their four-month bridging course to start the next grade. Bridge reassesses all children who finished the bridging course and are ready to resume their classes either in Grade 2 or 3. This bridging course is a key distinction between Bridge schools and any other non-formal primary education programme in Bangladesh.

Once the students are in a regular grade and have completed the bridging course, the rest of their primary education journey follows the path of BRAC's NFPE model.⁶ However, the teacher preparation, supplementary reading materials, and remedial teaching and learning approaches of Bridge schools differ from the BRAC NFPE programme. BRAC uses the same textbooks as public schools for Grades 4 and 5 because BRAC students take part in the Primary Education Completion Examination.

Why is Bridge important?

According to the recently released World Bank “learning poverty index”, in 2017 58% of children in Bangladesh at the upper primary grade cohort (ages 10 - 13) cannot read a simple text at a basic level. (See Chapter 6 for more detail.) Globally, UNESCO Institute of Statistics reported that 617 million children and adolescents do not achieve minimum proficiency level in reading and mathematics. Over 80% of these children without the foundational skills (reading and math) are living in low- and lower-middle income countries (UNESCO, 2018). Moreover, a 2015 United Nations final report at termination of the Millennium Development Goals and on the eve of launching the Sustainable Development Goals for 2030, shows that, world-wide, more than 263 million children and adolescents are out of school (UNESCO, 2016). South Asian countries (India, Bangladesh, Pakistan,

Nepal and Afghanistan), along with many Sub-Saharan African countries, are the major location of young adults unable to read. Without a major improvement in learning gain, it is unlikely any South Asian country (other than Sri Lanka) will achieve per capita GDP comparable to countries such as China, Malaysia, and Thailand in East and Southeast Asia.

With over 98% net enrollment rate in primary education in Bangladesh, arguably there are not enough never-enrolled children in Bangladesh to warrant NFPE schools. Nonetheless, with the dropout rate over the primary cycle still around 20%, many children require an intervention that caters to their need. With the 2013 launch of the Bridge school programme, BRAC, in partnership with Educate A Child, is offering a local solution that has the potential to respond to the serious global problem of school dropouts in the primary cycle.

Who are the participants?

Bridge School intervention can be offered at any primary and secondary grade. Modestly, BRAC started with Grades 2 and 3 dropouts to offer a full primary education curriculum in less than four and three years respectively. Bridge enrolls children who were dropped out in early primary grades. Bridge offers a flexible routine and expedited course for the children to complete the full primary school curriculum and earn a certificate via the Primary School Completion Examination. Bridge school is a natural fit for children who dropped out from school at an early grade. Bridge enrolled ~60,000 (50% female) underprivileged children from urban (32%), rural (33%), and hard-to-reach (35%) areas spread over 36 (out of 64) districts. According to the Bangladesh Bureau of Educational Information and Statistics (BANBEIS), these 36 districts have a higher dropout rate than other districts. Note that, based on our survey, many students who had never entered school have entered Bridge schools (Q47). Their academic performance, in terms of ability to read and do division is very similar to that of students who had dropped out of school.

6 BRAC's NFPE school is a one teacher and one classroom school. These schools are housed in the community through renting a space. Teachers are recruited from the community and receive pre-service training for 11 days prior to start of teaching in NFPE school. BRAC Education Programme arranges monthly refresher training for all teachers. Teachers are also supervised by BEP's field staff (known as Programme Organizers or POs).

Why BRAC adopted this approach?

The functional literacy programme to improve adult literacy rate in Bangladesh in the 1980s created the opportunity for BRAC to work at the community level with an education intervention. The adults from the functional literacy programme demanded a similar opportunity for their children to learn how to read and perform basic arithmetic operations. BRAC fulfilled their demand by creating BEP in 1985. Over 14 million children have graduated from BRAC Education Programme (BRAC Education Programme, 2022). The NFPE programme was designed for children who were never enrolled in primary education. This non-formal education is considered a second chance education for disadvantaged children. The non-BRAC primary and non-formal education programmes in Bangladesh were not designed however for children who entered a primary school and subsequently dropped out. At time of launching the Bridge Programme, in 2013, the national dropout rate was 26% (APSC, 2012, p.40). By 2015, the dropout rate fell to approximately 20%, which is still unacceptably high. The primary dropout rate in Bangladesh warrants an intervention that caters to the particular needs of those children, such as the Bridge Programme is providing.

Characteristics of the Bridge Programme

In bullet form, we summarize important features of the BRAC Bridge Programme. It has the potential of making a major contribution to the quality and inclusivity of primary education in Bangladesh, and perhaps for setting a precedent for other countries.

- Bridge ‘crash course’ of truncated curriculum in arithmetic and literacy prior to entering the formal programme.
- Crash programme assessed on the average rather than individual student performance, generating significant incentive to peer-teach.
- Curriculum targeted specifically to Bridge learners.
- Weekly, often daily, assessment of problems and progress.
- Emphasis on ‘feeling good’ in class.
- Strong partnership with families.
- Families instructed on how to support homework assignments.

- Follow-up of graduates including mentoring and access to help even into secondary school.
- Eleven-day teacher training programme allowing teachers to be trained quickly.
- Constant encouragement of teachers throughout the semester.
- Constant teacher up-grading and improvement.
- Local teacher pride in being professionally recognized.⁷
- Zero direct cost to students.
- New, carefully targeted learning materials.
- Cohort-based BRAC judgment on whether to begin cohorts in Grade two or three, thereby creating group social cohesion in each Bridge school.
- Tuition fellowships are available, easing access to advanced education.

In this final report, we have addressed two major research questions:

- How successful is the Bridge Programme in reintegrating children into the primary school cycle?
- Is the Bridge Programme useful for other developing countries facing the problem of unacceptably high drop-out rates?

The primary dropout rate in Bangladesh warrants an intervention that caters to the particular needs of children, such as the Bridge Programme is providing [for children who have dropped out of other schools].

⁷ Teacher pride is, in part, a function of gratitude. While enrollment gains have been significant in Bangladesh, rural female school graduates have not found nearly the labour market opportunities found by urban female graduates (Tanaka et al., 2021). This difference suggests that rural female graduates are grateful for the opportunity to become a teacher in a Bridge school.



CHAPTER THREE

LITERATURE RELEVANT TO BRIDGE

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WHILE THE WORLD CAN CELEBRATE considerable progress in terms of primary school enrollment, nevertheless 20% are not in school. In South Asia the portion not in school is 26%. Among females, it is 29%. Bangladesh approximates the world average with 20% of the school age population not in school. However, among the poorest quintile of the Bangladesh population the figure is 36%, which compares poorly with the portion among the richest quintile (13.6%) (UNESCO, 2005, p. 85; UNESCO, 2017).

In some parts of the world the major explanation for out-of-school children is the absence of supply. In other parts of the world, supply may be available; the problem is one of “demand” for education. The reasons for early student dropout as described by some who have studied this important problem:

- Financial problems, parents’ willingness, distance and lack of basic facilities, bad quality of education inadequate school environment and building, over-loaded classrooms, improper languages of teaching, carelessness of teachers, and security problems with girls (Chaudhry and Hammayun, 2015, p. 137).
- Poor home conditions, grade retention, student’s out of school companionship, truancy, difficulty in learning, student’s choice of child labour over studies, psychological problems, parental illiteracy and poor health (Farooq, 2013).

Out-of-school children and youth (OOSCY) often become a political issue causing governments in the ASEAN region to commit themselves to strengthening education for these children. (ASEAN OOSCY Declaration, 2016). We have summarized the available evaluation literature on interventions that mirror the structure and objectives of the Bridge Programme. While there is an abundant literature evaluating the work with dropouts through non-formal schooling structures and labour force participation, we could find no equivalent to the Bridge Programme whose purpose is to re-engage dropout children into formal primary education.

There have been few attempts to create remedial programmes to re-engage dropouts into formal education at a level where they would have been if they had not dropped out. Most attempts have targeted secondary school youth rather than primary school children (Borkan et al., 2015; Inoue et al., 2015; Kanamugire and Rutakamazi, 2008). In one case, the intervention failed to alter the cognitive achievement of girls and concluded that “remedial education does not produce within-student spillovers to math, or spillovers to other students (than males)” (Saaveda, Naslund-Hadley and Alfonso, 2017, p. 1).

However, there is an abundant literature on efforts to identify successful interventions in preventing dropouts from formal education. We summarize that literature here with one objective, to identify the characteristics of successful dropout prevention and match as best we can with

the characteristics of the Bridge Programme. At the end of our evaluation, it appears that the Bridge Programme has been successful.

The first general approach to reducing dropouts is to reduce the demand- and supply-side constraints (Birdsall, Levine and Ibrahim, 2005; Sumida, 2017; Brookings Institution, 2011; Hanushek, 1995; Petrosino et al., 2012). This can involve a ‘package’ of interventions (Graeff-Martins et al., 2006; Prevatt, 2003; Shin et al., 2016). Among the more significant initiatives is the reduction of household costs for attending school (Glewwe and Muralidharan, 2016; Glewwe, 2002). Critical to effective formal education is the presence of a teacher active in teaching every day. Averaging across developing countries, 19% of the teachers were found to be absent at the time of an unannounced survey (Chaudhury, Hammer, Kremer, Muralidharan and Rogers, 2006).

Prior to the entry into formal education, research suggests that a child’s preparation is essential (Nonoyama and Bredenberg, 2009; Grantham-McGregor et al., 2007). Most research of this kind refers to pre-school at a very young age. But not all of it. Some relates to programmes intended to minimize the loss of academic achievement over summer vacation, which is analogous perhaps to the Bridge Programme (Llic, 2011; Milisar, 2011; Quinn and Polikoff, 2017).

Some of the more powerful interventions have involved the concentration on social-emotional learning (Wang, Chu, Loyalka, Xin, Shi, Qu and Yang, 2016; Remschmidt et al., 2007; Walker et al., 2007). Concentrating on the social and emotional status of children may be nested within a package of interventions (Graeff-Martins et al., 2006). In some instances, the social and emotional health of children is described as the ‘whole school approach’ involving coordinated activities across the breadth of the curriculum, the ethos and positive environment of the school and partnerships with family and the local community (Goldberg et al., 2019). In other examples it is described as an “inclusive education philosophy including social, professional and school transformations” (Farooq, 2013 p. 47). In one study, a positive atmosphere in school allows the pupil to “feel well in which being in school becomes a choice to ‘feel well’ and not a compulsory requirement” (Federico, 2019; Batini et al., 2019). This positive environment is underscored by how academic performance is treated. Children think about dropping out when they get discouraged and feel that there is little hope

to overcome performance problems (Zuilkowski, Jukes, and Dubeck, 2016). School experience is not limited to classrooms. It includes playgrounds, the trip home, recess, and many school activities. If a child feels bullied by other children, for example, it will have a detrimental effect on the desire to learn (Townsend et al., 2008).

Much of ‘inclusive education’ involves interventions with parents and families. ‘Responsive caregiving’ leads not only to better health, but also to child success in spite of impoverished environments (Eshel et al., 2006). Results from work in India suggest that the children of parents who did not participate in parent/teacher meetings or discuss academic progress with their child’s teacher or did not supervise homework were more likely to drop out of school (Paul, Rashmi and Shrivastava, 2021; Ronak et al., 2021). In Bangladesh some studies suggest that the relationship of the child within the household and support from parents when the child requests help is a significant element in explaining which children drop out of school (Sabates, Hossain and Lewin, 2010). Similarly, dropouts are associated with a family’s etiology (set of orientations or causes). Interventions that work help establish a moral responsibility in the family to send their children to school. (Mishra & Abdul-Azeez, 2014).

Key among effective in-school approaches is ‘flexible learning’. Many large and formalistic systems of education have rigid structures, impervious to alteration even when needed. In one ‘flexible learning’ programme, new specially designed learning materials were made available as was strong support from the local community along with a mentor or school ‘buddy’ with whom a student might talk frankly (Jukes, Jere, and Pridmore, 2014). Also important is the ability to ‘identify and track children’ who may display performance and/or confidence problems well before they become unresolvable. If identified early, the teacher can, each day, devote attention to the student’s goals (Christenson and Thurlow, 2004).

Results from work in India suggest that the children of parents who did not participate in parent/teacher meetings or discuss academic progress with their child’s teacher or did not supervise homework were more likely to drop out of school.



PHOTO © BRAC

Reporting period: January–June 2018

Enrollment: 11,604/60,000

BRAC considers Bridge School as an option to ensure children's right to education instead of an opportunity by the state (Bridge, 2018a). In this period, Bridge enrolled 11,604 children in 400 Bridge schools in 20 districts in Bangladesh. BRAC followed the following steps to open these 400 schools:

- Secured approval from the NGO Affairs Bureau of the Government of Bangladesh.
- BRAC's field staff identified the geographic pockets where primary school dropouts are higher in number than neighbouring areas.
- Recruited staff to implement school activities and provided them with the required training.
- Built the cohort to start at Grade 2 or 3 based on the survey and preliminary assessment.
- Recruited female teachers from the community and trained them for 12 days before starting the class.
- Ensured continuous supervision by Project Officers, Branch and Area Manager, and Staff from BRAC Headquarters following a prescribed quality assurance checklist.

- District and upazila (sub-district) level coordination with the field level DPE officials.

Reporting period: July–December 2018

Enrollment: 11,600/60,000

BRAC continued to work in 400 communities with 11,600 children. BRAC expanded its reach to 1,700 new communities from 33 districts including seven new districts (Bridge, 2018b). Once surveyed and identified, an area with a significant number (25 or more) of children who dropped out at an early grade (2 or 3) was considered a potential Bridge school location. Selection of these schools strictly followed guidelines, such as:

- A Bridge school will maintain at least a kilometer distance from a neighbouring public(government) primary school; however, the distance restrictions are flexible for Bridge schools in slums, refugee camps, towns and cities.
- A one-room Bridge school in an urban area will be at least 306 square feet and 318 square feet in semi-urban and rural areas.

- All schools will have at least five windows, measuring 8.75 square feet (3'6" x 2'6") each, to ensure sufficient natural light and ventilation.

BRAC hired 1,700 teachers for the newly established Bridge schools. Selection criteria to teach in Bridge school were similar to BRAC's NFPE schools:

- Only female candidates as teachers will be selected.
- Teachers will be selected through a competitive recruitment process that includes subject based knowledge (language—Bangla and English, math and science).
- High school graduate (Higher Secondary Certificate; 12 years of schooling).
- Preferably, candidates are married and, hence, are likely to stay in the same community for the duration of a Bridge school cohort.
- Teachers must have the ability to conduct psycho-social activities for the students.
- Newly recruited teachers receive two mandatory trainings, basic training (11 workdays) and orientation (four workdays), followed by monthly refresher training.

In this reporting period, measuring learning gain and offering remedial teaching were two important activities of the Bridge School programme. Teachers conducted learning assessments on a regular basis. Bridge administered pre-enrollment tests before enrolling children in school and post-tests after completion of the four-month bridging course. Students lagging behind their peers were offered before- and after-school tutorial support by their teachers to ensure that all children in Bridge school meet the minimum proficiency requirements to move into their intended grade (2 or 3).

Reporting Period: January–June 2019

Enrollment: 49,231/60,000

Bridge School programme uses its own textbooks for Grades 2 and 3. BRAC intended to achieve the same set of grade-specific learning outcomes and terminal competencies as suggested by the National Curriculum and Textbook Board (NCTB) of the Government of Bangladesh. Bridge uses NCTB's textbooks for Grades 4 and 5 as all students intend to participate in the Primary Education Completion Examination (PECE). At Bridge,

students complete the full primary education cycle in 36 or 40 months. Table 1 presents the months to complete, which vary between students in a Grade 2 or 3 cohort (Bridge, 2019a).

Table 1: Bridge School Programme duration for completing primary education

Grade	Enrolled in Grade 2 (Cohorts 1 and 3)	Enrolled in Grade 3 (Cohort 2)
Bridging Course	4 months	4 months
Grade II	7 months	—
Grade III	8 months	10 months
Grade IV	10 months	11 months
Grade V	11 months	11 months
Total	40 months	36 months

Bridge encourages all students to participate actively in co-curricular activities such as music, dance, and poetry. The goal is to nurture children's creativity. Children contribute to Protibha, an art magazine that BRAC publishes for the students. Bridge and other BRAC school students are the major contributors of paintings, poetry, and stories to this magazine.

The internal monitoring team of Bridge conducted an assessment on 116 randomly selected schools of Grade 3 classes. This study found that 85% (87% for girls) of students were regularly attending the class; 85.4% acquired Bangla reading and writing, 81.9% English reading and writing, and 72.4% math proficiency (Bridge, 2019a).

All teachers received monthly refresher training and 68% of teachers had received basic training prior to assuming teaching role; 32% received in-service training. Teachers and programme organizers (POs) organized parents meeting to discuss various social and psycho-social issues related to child marriage, dowry, child rights, children's mental health, and dropout policy.

Reporting period: July–December 2019

Enrollment: 72,196/60,000

In this reporting period, Bridge opened an additional 400 schools for another 9,600 children at Grade 2. In addition to the implementation of routine work, Bridge organized meetings with elected local government officials. Based on some preliminary analysis of locally collected socio-economic data, BRAC organized multiple (2-3) Focus Group

Discussions to leverage community support for the Bridge School programme.

In order to prevent dropout from Bridge schools, BRAC arranged the following:

- Flexible school hours as recommended by the community;
- Playful learning environment;
- Low-cost materials to decorate classrooms mainly to engage children in non-academic activities to build rapport with their teachers;
- Community engagement activities to ensure greater ownership of the school; and
- Monthly parents meeting to highlight the importance of education for their children.

During this reporting period, BRAC revisited their programme implementation to ensure that:

- Children from marginalized communities get the opportunity to enroll in bridge schools;
- At least 50% of students are girls;
- Children with disabilities get preference — for instance, each newly launched school enrolled at least one child with disabilities;
- Persons with disabilities receive assistance devices from BRAC; and
- Overaged and dropout children enroll in Bridge schools.

BRAC added the following four new components to the Bridge school programme during this reporting period:

- Child protection and awareness to prevent children from sexual abuse and violence at an early age. BRAC sensitized children through building awareness about their body parts, discussing good and bad touches. BRAC also worked with teachers, non-teaching staff, parents and community members to build awareness against sexual abuse and violence.
- All 2,500 schools received reading materials, other than textbooks, for their mini libraries. These materials are mainly the story books for the children to further hone their reading skills.
- Piloted a new assessment system in 10 Bridge schools and recommended a five-day training module for teachers and one-day module for the management

teams. 240 students from 10 pilot schools had participated in this new assessment system.

- The first cohort of 400 schools that started with Grade 2 students now moved to Grade 4, and received science instruments that are relevant to Grade 4 textbooks.

Analysis of students' learning assessment found that students were consistently performing better than a year earlier, in bangla (mother tongue) reading and writing (93%), followed by English (85%) and math (79%). (Bridge, 2019b).

Reporting Period: January–June 2020

Enrollment: 69,371/60,000

BRAC reported that, to date, 2,825 students have dropped out of Bridge school and 69,371 students are currently enrolled in 2498 schools. Two schools were demolished due to slum evictions (Bridge, 2020a). During the reporting period, the third cohort of students started at Grade 2, and the students from first and second cohorts moved to Grades 5 and 4 respectively. The Bridge model is a one-teacher one-classroom school; therefore, teachers also move to teaching a new grade, with new materials and textbooks. Bridge uses government textbooks developed and disturbed by NCTB for Grades 4 and 5. Teachers in these new grades received special training on these grade-specific textbooks and curriculum. Given the volume and complexities, Bridge offered two-day monthly refresher training to teachers who are teaching Grades 4 and 5. All Grade 5 (cohort 1) students (9,682 students including 5,444 girls) received special workbooks to practise in preparation for PECE, the public examination at the end of Grade 5.

BRAC conducted a teacher preparation evaluation on all 400 teachers who teach in the first cohort of 400 schools. 150 teachers were identified for additional mentoring and coaching support to be able to teach Grade 5 students.

The COVID pandemic posed a big threat to all students in Bangladesh. Bridge is not an exception. However, BRAC offered COVID awareness and safety training prior to the school closure in late March 2020. The training included proper handwashing techniques, and respiratory hygiene. Teachers maintained close communication with the students to ensure that children continue their studies

at home. Teachers offered lessons via phones, followed by home visits to offer additional tutorial support to students. Also, BRAC maintained regular communication, mentoring, and coaching support to teachers. Given the low socio-economic status of Bridge school students, access to television, computer or smartphones is not useful for accessing online learning and teaching. BRAC introduced “feature” phone-based teaching. During the pandemic, BRAC continued teaching students through these “feature” phones, which allowed 3-4 students to access their teacher remotely and listen to the teacher’s instruction. Most households in Bangladesh have at least a feature phone. Thus, the Bridge school students succeeded in continuing their studies while isolated in their homes due to the COVID pandemic.

Reporting period: July–December 2020

Enrollment: 72,196/60,000

The COVID pandemic led to school closure by the Government of Bangladesh, allowing only online and remote learning provisions - irrespective of the type of school a child might have attended. BRAC reported their total Bridge school population is mostly from hard-to-reach areas, urban slums, and rural areas. BRAC enacted home school initiatives to continue teaching and learning activities in all 2498 schools (Bridge, 2020b). (Two schools were evicted by the government due to slum removal and were shut down in March 2020.) BRAC brought all schools under home school coverage in phases from May through August 2020, and continued this home school operation until December 2020. BRAC home school features include:

- Engaging parents to access Bridge students via their phones.
- Conducting remedial classes for the students in Grade 5 who were supposed to take part in the PECE. (Ultimately, the Government abandoned the PECE exam for 2020. The future of PECE is uncertain. A national committee on NCTB curriculum reform has recommended to scrap this examination.)
- Cascade training by BRAC staff at Head Office to the teachers in Bridge schools.
- BRAC continued refresher training via phone and monitoring the situation to potentially resume face-to-face training.

- BRAC has been offering mental and emotional wellbeing training through home schooling. BRAC field level staff are continuing to monitor and coach teachers via phone. However, BRAC had to pause this home school intervention due lack of funds.

Reporting period: January–June 2021

Enrollment: 72,196/60,000

The Covid-19 pandemic enforced school closures in Bangladesh. Bridge school continued to offer instruction based on feature phone to keep children in touch with the school and maintain learning progress. The long-term lockdown and school closure caused 4% dropout of students engaged in income generating activities. In the last reporting period, 9,638 students (5,414 female) graduated from 400 Bridge schools. As a result, Bridge Programme continues operating in 2,100 schools with 58,920 students (55% female). In order to prevent drop out and continue children’s schooling, BRAC trained over 2,000 teachers and their supervisors to teach via phone and revamped home visits, to consult with parents and communities to encourage children’s schooling. During the reporting period:

- BRAC continued to offer home schooling via feature phone, which is available in 95% of households in Bangladesh. Instead of high-tech smart phone and additional internet expenses, children were able to connect to their teachers in groups of four (3 students and their teacher), a service that feature phones were already offering but not much known.
- Due to the budget constraints, BRAC switched to home visit from home schooling via feature phone for half of the reporting period. Parents recognized the importance of their children’s education and teacher home visits. Evidence of Bridge teachers’ support, despite school closures, inspired family support for their children’s education. Bridge teachers were able to offer need-based learning instructions, mainly to the children with disabilities.
- Students in all Bridge schools receive textbooks from the Government of Bangladesh. Additionally, teachers distributed two workbooks to Grade 5 students during their home visits. Bridge school teachers and their supervisors checked students’ workbooks to

ensure that students are completing their lessons at home and to offer necessary remedial teaching.

- **REMEDIAL TEACHING:** BEP has developed a three-staged remedial programme to minimize the learning gap and assist children to achieve learning competencies. The remedial classes are expected to create opportunities for attaining basic skills and reinforce confidence in students to become self-learners. A lesson distribution plan has been developed and BEP staff have been provided with the necessary training along with a detailed guideline.
- **CHILDREN LEARNING GROUP (CLG):** An experiential learning mechanism that introduces diverse learning opportunities through small groups of children meeting inside and outside the classroom. It is expected that CLG will create flexible learning spaces and hands-on learning experiences beyond the classrooms. Grade-specific lessons are currently being developed.

- **PROJECT BASED LEARNING (PBL):** A learner-centred approach provides students with opportunities to develop skills such as critical thinking, problem solving, communication, collaboration, creativity and a deep understanding of the content. BEP is developing a Grade 5 PBL curriculum focusing specifically on *Bangladesh and Global Studies* and *Science*.
- **FUN SHEET:** Self-learning materials/worksheets are intended to enable children to become autonomous/independent learners.

SHARIFA AKHTER is a teacher of BRAC Bridge School in Narsingdi, Bangladesh. She feels it is her responsibility to impart the knowledge she has to build future leaders. © BRAC





CHAPTER FIVE METHODOLOGY

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FIRST AND FOREMOST, the research team wanted to understand the Bridge school programme. We wanted to see where it sits in the broader BRAC Education Programme structure. How has the Bridge school project absorbed lessons from the traditional NFPE school programme that BRAC implemented, over three decades, for children who never enrolled in a government primary school?

While overall primary school completion rates have risen in Bangladesh over the last two decades, about 20% of the primary age cohort are not completing. The education system as a whole has not been successful in retaining to completion a satisfactory share of students in the primary school age cohort. We did not study the entire education system of Bangladesh to answer dropout issues in government and NFPE schools. Instead, we wanted to see how successfully Bridge school programme was offering a ‘second chance’ to dropout and never-enrolled children in urban and rural areas. We developed and administered a methodology that has both quantitative

and qualitative components to answer what, how, and why questions. Finally, we wanted to discuss whether the Bridge school model can be a local solution to a global problem.

Key informant interviews

The research team interviewed key personnel at BRAC Education Programme who are involved in design, implementation, management, and monitoring of the Bridge as well as the overall BRAC Education Programme. The key informant interviews were divided into the following groups or clusters:

- BEP leadership;
- Material Development Team;
- Monitoring and Evaluation;
- Field implementation; and
- Finance.

Random sample survey

We chose a representative sample of the Bridge school population, with urban/rural and gender disaggregation. We identified students from 120 schools in 25 upazilas (sub-districts), randomly chosen from 13 districts. Further randomization was done at the school level by selecting a representative group of students within the chosen schools. We obtained 1596 responses to the reading and mathematics questions based on the ASER-India protocol: 351 from Grade 4 Bridge students, 1174 from Grade 5 Bridge students, 71 from non-Bridge NFPE schools. Since we correlate results of many of the family characteristics and teacher/family relations questions with student outcomes, we simplified analysis by restricting detailed family-related questions to the 1,174 Grade 5 Bridge students.

A dichotomous reader versus non-reader or student who can or cannot perform basic arithmetic operations is an inadequate approach to describe performance of the children. We wanted a survey that satisfied several important criteria:

- the reading and mathematics learning outcome thresholds are easily understood and are widely seen to be reasonable expectations of students in Grade 3 - in Grade 5 at latest;
- the protocol enables comparison with primary school children in other school programmes in South Asia;
- the survey can be conducted in students' homes, thereby enabling us to interview students and student guardians, learn about characteristics of the family, family/teacher interaction, and reasons for the student to have abandoned his or her original school. Administration of the questionnaire involved both Bridge students and at least one parent or caregiver, whoever was available at the household during the survey. Conducting the survey in homes avoids teacher bias and follows ASER protocol.

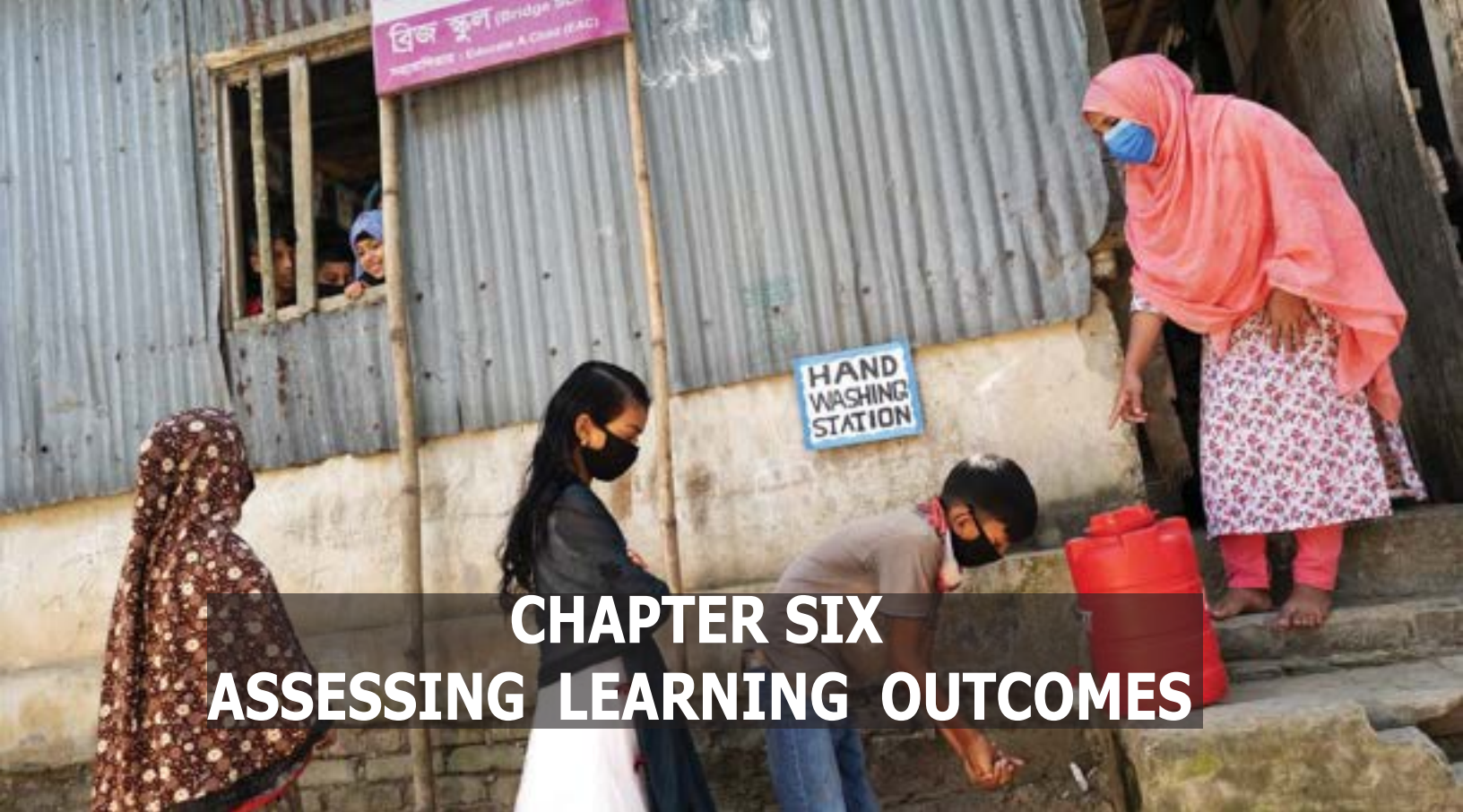
The protocol that best satisfies these criteria is the NGO-led ASER survey, organized by Pratham, an Indian NGO. The ASER protocol has been used in many languages across India and Pakistan, and in a few other countries. There are legitimate questions as to ASER's choice of reading and arithmetic features. However, the purpose of our survey is not to deep dive into a serious epistemological discussion of measures of literacy and

numeracy. One advantage of using ASER protocol is that it has a Bangla version, originally applied and developed for West Bengal, the Indian state neighbouring Bangladesh on its western border.

We researched the problem and analyzed data based on our interpretation of family and family/teacher dynamics. (The three team members have collectively over 120 years of experience in comparative international education, education development, political economy of education, and donor dynamics.) The research team extensively interviewed key personnel of Bridge school at its headquarters and in the field. Through this research, the research team members became a part of the process. A pure quantitative research method may partially answer the research questions that we would like to answer. Therefore, we preferred an interpretive research paradigm to analyze Bridge school.

The survey questionnaire has three parts. First is a general information section with a unique student identifier for the analysis purpose. We will delete this identifier after the assessment to maintain ethical considerations of anonymity. Second, the questionnaire explores many aspects of the student's family, family/teacher interaction, and reasons for the student to have abandoned his or her original school. We have correlated detailed information on these questions with children's reading and arithmetic skills. We also undertook simple regression analysis that explored associations between learning outcomes on the one hand, and on the other, family characteristics, teacher/family relations, and geographic sub-district indicator variables. Third, we have a reading comprehension section that we call "ASER plus" to explore correlation between children's reading fluency (measured by ASER criteria) and comprehension. In this report we have not included the comprehension section. We intend to analyze it in an academic article discussing comprehension.

While overall primary school completion rates have risen in Bangladesh over the last two decades, about 20% of the primary age cohort are not completing.



CHAPTER SIX ASSESSING LEARNING OUTCOMES

PHOTO © BRAC

Introduction

MDG2 (universal primary education by 2015) enjoyed a high rank among the Millennium Development Goals launched in 2000. In 2000, Sri Lanka had already realized universal quality primary education. By 2015, the four other major South Asian countries realized impressive gains in enrollment and in completion of the primary cycle (see Figures 1 and 2). By 2015, in India, Nepal and Bangladesh, approximately 80% of the primary age cohort were completing the primary cycle. However, since 2015, approximately 20% of the primary age cohort in these three countries are still not completing.⁸ BRAC's Bridge project is an ambitious programme attempting to lower the primary school incomplete rate in Bangladesh.

Cognitive scientists, development economists, early child psychologists, all kinds of educators – and parents – may disagree on pedagogy for teaching reading and mathematics. However, virtually all agree that a well-run school system should strive to achieve near universal mastery of basic reading and simple arithmetic operations by Grade 3. If not Grade 3, by Grade 5 at latest. Achieving higher grade levels in reading and mathematics is a

cumulative learning process. Writing in the 2016 ASER India report, Rukmini Banerji⁹ bluntly makes the case for an early grade emphasis on “learning for all”:

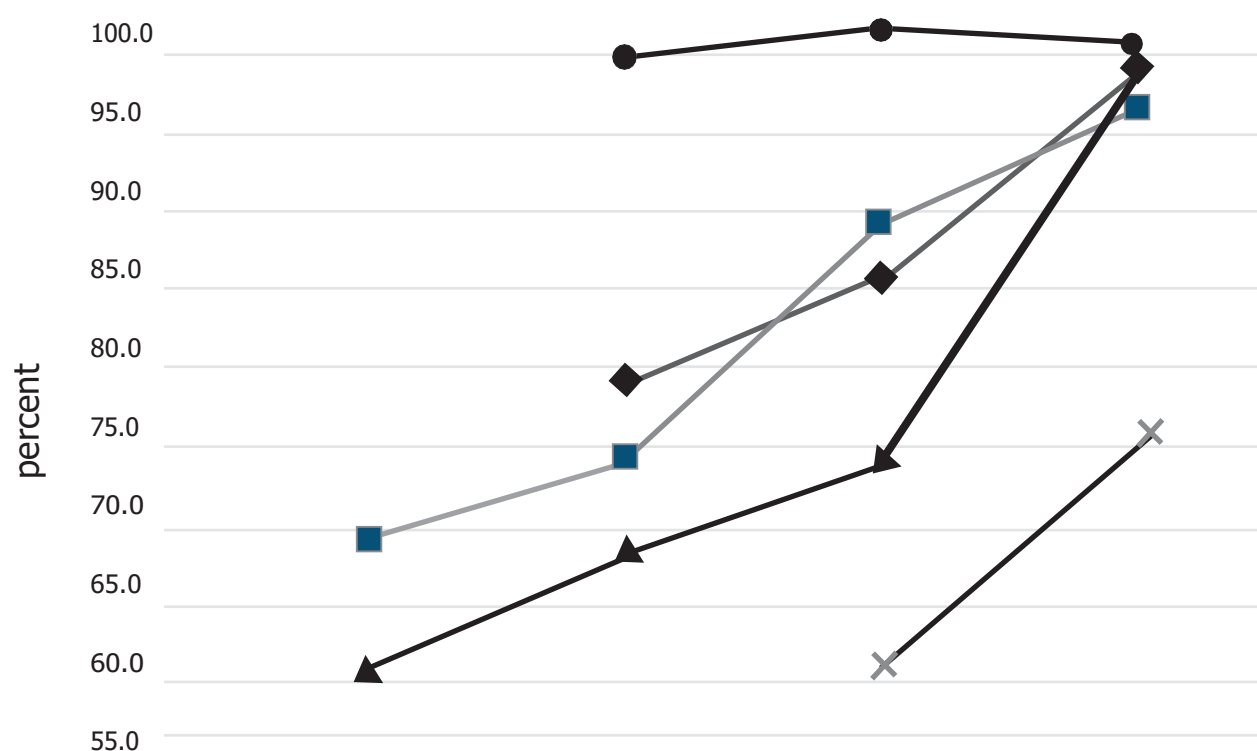
Evidence strongly indicates that by the third year in school (well before they have spent even 1000 days in the education system), children's future is sealed. The equity and growth implications of teaching only to the “top of the class” are frightening; the [implications] are camouflaged by the outward signs and symbols of universal schooling. If “learning for all” is not given top most priority, if clear and achievable goals are not set, if teachers and parents are not supported in their efforts to help children learn, we will lose all the potential benefits of bringing every child to school. (Banerji, 2017, p. 15)






There are many important learning goals beyond reading and numeracy – goals such as learning social values and basic scientific ideas, studying the country's geography and history. (Tables summarizing substantive survey questions appear in Appendix 1. Q53 asks students to rank difficulty of all subjects in Bridge curriculum.) However, the ability of students to read and write the major regional language and perform basic arithmetic are the necessary foundation for a well-functioning primary school system.

⁸ The completion rate in Pakistan increased over the 2000-2015 years but, by 2015, the incomplete rate was about 40%. The source of these statistics is UNESCO Institute of Statistics (UIS).

⁹ Rukmini Banerji is the chief executive officer of Pratham, the civil society organization responsible for the Annual Status of Education Report, Rural (ASER). The report summarizes results of the large-scale biannual surveys of reading and arithmetic throughout rural India.

FIGURE 1: Net Enrollment Rate, South Asian Countries, Primary Age Cohort, Selected Years



	ca. 1980	ca. 1990	ca. 2000	ca. 2015
 Bangladesh	67.6	72.5	87.7	94.9
 India		77.5	84.1	97.7
 Nepal	59.4	66.6	72.6	97.1
 Pakistan			59.0	73.8
 Sri Lanka		98.3	99.9	99.1

Source: UNESCO Institute of Statistics (UIS) for Figures 1 and 2.

Note: Data are based on household surveys and are available for only some years. Bangladesh 2000 estimate is an interpolation between 1990 and 2005. The net enrollment rate is the number of children of the official primary school ages (6 – 10) enrolled in Grades 1 – 5, relative to the total population of children ages 6 – 10.

Bridge survey results

A major component of our evaluation of the Bridge project is an assessment of learning outcomes. Using a modified version of the ASER-India protocol applied to its large-scale biannual surveys, we surveyed a sample of 1600 students, in Grades 4 and 5, most in BRAC Bridge schools, a minority in regular BRAC non-formal primary schools. To our knowledge, this is the first nation-wide assessment survey conducted in Bangladesh using a protocol that permits comparison of results with primary school children elsewhere in South Asia.

In South Asia, ASER has become the most widely respected assessment protocol for evaluating early primary

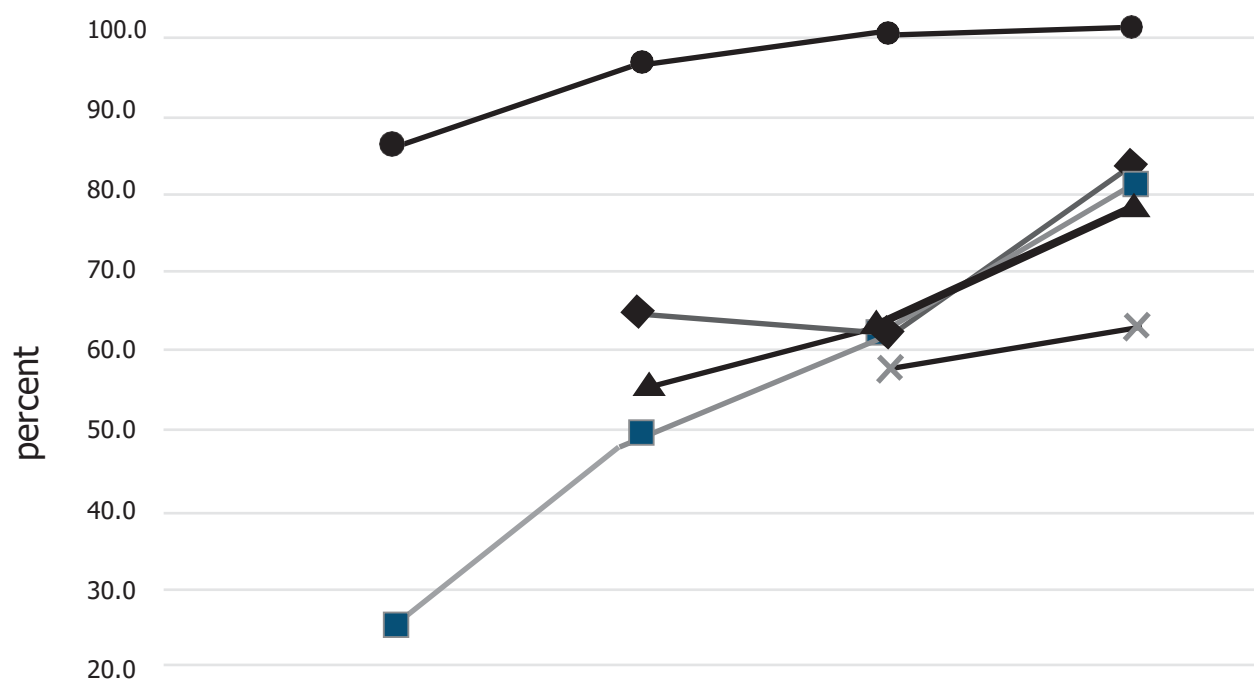
school learning. ASER bases its assessment on items drawn from the relevant Grade 2 curriculum (see Figure 3 for the reading and mathematics elements used in our survey). It has two major advantages over alternatives (such as the National Student Assessment in the context of Bangladesh):






The ASER assessment thresholds are easy to understand. They are outcomes required of any primary education programme. ASER survey results are typically displayed as discrete distributions of five learning levels for each skill (see Table 2):

Reading:

- inability to recognize individual letters,

FIGURE 2: Survival Rate to Final Year of Primary Cycle, Selected Years



	ca. 1980	ca. 1990	ca. 2000	ca. 2015
 Bangladesh	20.5	46.7	58.6	80.0
 India	59.4	52.2	59.0	76.9
 Nepal	83.5	94.4	97.8	99.2
 Pakistan	62.0	62.0	55.2	60.9
 Sri Lanka	83.5	94.4	97.8	99.2

Source: UNESCO Institute of Statistics (UIS) for Figures 1 and 2.

Note: The survival rate of a cohort of students enrolled in the first grade of a given level or cycle of education in a given school year is the percent expected to reach the final grade, regardless of grade repetition. The (gross) completion rate is the percentage of a cohort of children or young people aged 3-5 years above the intended age for the last grade of each level of education who have completed that grade. The intended age for the last grade of each level of education is the age at which pupils would enter the grade if they had started school at the official primary entrance age, had studied full-time and had progressed without repeating or skipping a grade. For example, if the official age of entry into primary education is 6 years, and if primary education has six grades, the intended age for the last grade of primary education is 11 years. In this case, 14-16 years ($11 + 3 = 14$ and $11 + 5 = 16$) would be the reference age group for calculation of the gross primary completion rate. Due to lack of available survival rate data, the following illustrated outcomes are primary completion rates: Bangladesh (2014); Pakistan (2006, 2014). Furthermore, the ca.2000 Bangladesh survival rate is based on interpolation between 1988 and 2008 data.

- recognition of individual letters,
- recognition of individual words,
- ability to read (with three errors or fewer) a Grade 1 level paragraph,
- ability to read (with three errors or fewer) a Grade 2 level short story.

Mathematics:

- inability to recognize single-digit numbers 0 - 9,
- recognition of single-digit numbers,
- recognition of two-digit numbers,

- ability to solve problems involving two-digit subtraction with carry-over,
- ability to solve division of a three-digit number by a single-digit number.

ASER undertakes surveying in students' homes. Relative to classroom assessments (such as the NSA), at-home surveying enables an understanding of children's families and teacher/family relations.

We have summarized the learning outcomes from the Bridge survey in Table 2. For both reading ability and arithmetic, we constructed ASER distributions. The

FIGURE 3: Sample ASER reading and arithmetic questions

Paragraph

বাংলা অনুচ্ছেদ

আজ মাঠে মেলা বসেছে। রানা আর মালা মেলায় যাবে। সাথে যাবে মা আর বাবা। ওরা সবাই জিলিপী খাবে।

Story

গল্প

তিথি বাড়ির একমাত্র মেয়ে। বাবা মা তাকে খুব ভালোবাসেন। সে মাছ খেতে ভালোবাসে। ওর বাবা বাড়িতে মাছ আনেন। তিথি তখন মায়ের পশে ঘুরঘর করতে থাকে। মাছ তেলে ছাড়া হলে তার মন খুশিতে ভরে যায়। তিথি একসাথে তিন চারটে মাছ ভাজা খেয়ে নেয়। বাবা তিথিকে নিয়ে বাজারে যান। মাঝে মাঝে বাবা বাজার থেকে ইলিশ মাছও আনে। সেদিন তিথির খুশির সীমা থাকে না।

Letters

Students were asked to identify any five letters	
বর্ণ	
ন	প
ম	চ
স	থ
গ	দ
র	ল

Words

Students were asked to identify any five words	
শব্দ	
বাঘ	নোট
নালা	দিন
চুন	কৌটা
রাণী	দেশ
ভোট	বুড়ো

Numbers

Single digit

সংখ্যা পরিচয় (১-৯)	
৩	৭
১	৪
৮	৯
৫	২
যে কোন পাঁচটি সংখ্যা পড়ে শোনাও	

Double digit

সংখ্যা পরিচয় (১০-৯৯)	
৬৫	৩৮
৯২	২৩
৪৭	৭২
৫৬	৮৭
২৯	১১
যে কোন পাঁচটি সংখ্যা পড়ে শোনাও	

Subtraction

বিয়োগ	
৫১ - ৩৫	৬৭ - ৪৮
৮৪ - ৪৯	৭৩ - ৩৬
৪৬ - ২৭	৩১ - ১৩
৪৫ - ১৮	৪৩ - ২৭
যে কোন দুইটি	

Division

ভাগ
৬)৯১৮(
৬)৭৬৯(
৮)৯৮৩(
৪)৫১৩(
যে কোন একটি

Source: Adapted from ASER India (2017).

Source: Adapted from ASER India (2017).

Table 2: Learning Outcomes, BRAC Bridge Survey

Distributions of reading outcomes, by ASER categories						
	Not able to identify letters	Able to identify letters	Able to identify words	Able to read paragraph	Able to read story	Total
BRIDGE	Percent					
Class 4 (n=351)	3.1	4.3	28.5	14.8	49.3	100.0
Class 5 (n=1,174)	1.4	6.0	20.2	19.4	53.1	100.0
NON-BRIDGE NFP	Percent					
Class 4 (n=71)	1.4	0.0	29.6	26.8	42.3	100.0
Distributions of arithmetic outcomes, by ASER categories						
	Not able to identify single digit numbers	Able to identify single digit numbers	Able to identify two digit numbers	Able to do two digit subtraction	Able to do division	Total
BRIDGE	Percent					
Class 4 (n=351)	1.4	5.7	22.8	22.8	47.3	100.0
Class 5 (n=1,174)	0.6	5.5	15.1	15.8	63.0	100.0
NON-BRIDGE NFP	Percent					
Class 4 (n=71)	0.0	2.8	14.1	23.9	59.2	100.0

Source: Bridge survey, November 2021

Note: The statistics reported are the highest level at which students responded successfully. For example, in Class 5, 53.1% of students sampled successfully read the story, and were able to respond successfully to all lower levels. 19.4% read the paragraph, but not the story. Hence, 72.5% (= 19.4% + 53.1%) were able to read the paragraph. Similarly, in Class 5, 63.0% were able to solve division problems; 15.8% were able to do two-digit subtraction (with carry-over) but not division. Hence, 78.8% (= 63.0% + 15.8%) were able to do subtraction.

majority of respondents are in Grade 5 Bridge schools (n=1174). We also report results for Grade 4 students in Bridge schools (n=351) and in standard non-Bridge NFP schools (n=71). At this stage in the Bridge Programme, all students are in Grade 4 or 5. Taken out of context,

the average reading performance of Bridge students is modestly above the average student surveyed in India; the average arithmetic performance of Bridge students is dramatically above the all-India average.¹¹ Comparison between all-India results and Bridge students requires that

we acknowledge three important qualifications:

COVID learning loss: The ASER all-India survey was conducted in 2018, prior to onset of the COVID pandemic and attendant learning losses among students. By contrast, we evaluated Bridge students in November 2021, 20 months into the pandemic. Over most of this period, Bridge schools have been closed. Bridge continued teaching by frequent teacher contact with families and communication with parents via “facility” phones. (Few Bridge families have access to a phone with internet access; the great majority have access only to a phone without internet access - see Q28-Q30.)

Disruption of student primary school history: Many Bridge students initially attended a non-BRAC school, and dropped out.

(See Q49 for reasons leading to drop out and Q51 for type of school previously attended.) For other students, Bridge has provided an option enabling students who had never enrolled to enter into a primary school and “catch up” via intensive teaching (see Q47).¹² Although Bridge schools were not designed to enroll never-enrolled students and never started with a Grade 1 cohort, many students in our survey reported that they had not attended any other school. The study team did not explore if never-enrolled

Table 3: All-Children Indian ASER Distributions of Reading Performance, 2018, by Grade						
	Not able to identify letters	Able to identify letters	Able to identify words	Able to read Grade 1 paragraph	Able to read Grade 2 story	Total
(percent)						
Grade 1	42.7	32.6	13.7	5.2	5.8	100
Grade 2	21.3	30.2	21.3	12.5	14.7	100
Grade 3	12.1	22.6	20.8	17.3	27.2	100
Grade 4	7.6	15.9	16.6	19.3	40.7	100
Grade 5	5.9	11.7	13.0	19.1	50.3	100

Table 4: All-Children Indian ASER Distributions of Mathematics Performance, by Grade						
	Not able to identify single-digit numbers	Able to identify single-digit numbers	Able to identify two-digit numbers	Able to solve subtraction problems	Able to solve division problems	Total
(percent)						
Grade 1	35.7	37.1	21.3	3.9	2.0	100
Grade 2	14.9	37.1	34.6	10.6	3.8	100
Grade 3	7.6	26.9	37.5	19.6	8.5	100
Grade 4	4.4	19.2	34.2	24.6	17.6	100
Grade 5	3.3	13.8	30.5	24.5	27.8	100

Source: ASER India (2019, pp. 52–53) for Tables 3 and 4.

the reading and arithmetic results are pessimistic. In the context of the “learning crisis”¹⁰ in much of South Asian primary schools, the pandemic, and the low income of Bridge student families, we think this is a very good result!

Comparing Bridge outcomes with Indian and Bangladesh government schools

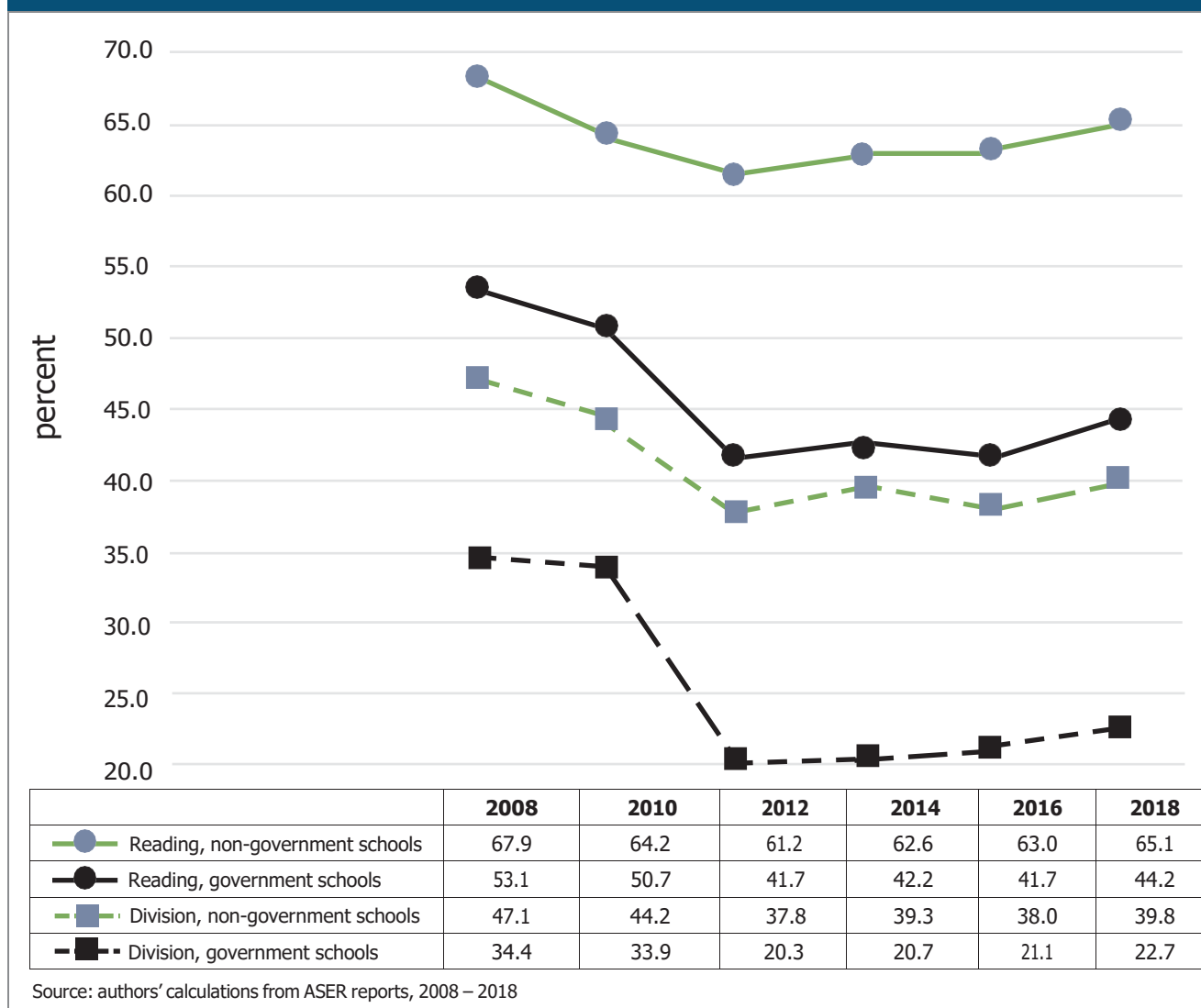
The Indian pre-COVID 2018 ASER results provide an initial benchmark for comparison with Bridge students (see Tables 3 and 4). At Grade 5, the percent of Bridge students able to read the story is slightly above the all-India result (53.1% relative to 50.3%). The comparable percent of Grade 5 Bridge students able to do division is 63.0% relative to 27.8% for all-India. In summary,

¹⁰ For further discussion of the “learning crisis” in South Asia, see discussion below.

¹¹ The gap between Bridge reading performance and the all-India statistic is modest, 2.8 percentage points (= 53.1% - 50.3%). However, the gap is sufficiently large that the difference is statistically significant at 5% significance level.

¹² The students who had entered a school and dropped out performed somewhat better than those who had never enrolled. In terms of reading, 56.5% of students who had dropped out could read the story, as opposed to 51.1% among the never enrolled. In terms of doing division, the comparable results are 65.9% for dropped-out students and 61.3% for never enrolled.

Figure 4: Share of Grade 5 students able to read ASER story and do division, by school type, India, 2008-18



children had been through other forms of education, either at home or at other non-formal education facilities.

Low-income families: Bridge students come from low-income families. Not surprising, the proportion of parents able to read and write is low. Approximately 60% of students' families own a small amount of land. Among those owning land, the median is 13 decimals.¹³ (See summary of responses to Q12, Q16, Q18, Q20-Q23.)

Given the difficulties facing Bridge students, our overall conclusion is that the Bridge student ability to read and do basic arithmetic is impressive.

¹³ Among the 772 children whose families own some land (Q21), the top quartile is 33 decimals, median 13 decimals, bottom quartile 5 decimals. In terms of homestead land (Q22), the top quartile is 17 decimals, the median 8 decimals, the bottom quartile 4 decile. In terms of arable land, the top quartile is 22 decimals, the median and bottom quartile both 0.

ASER surveys have disaggregated results over the last decade by government versus non-government schools. In the 2018 survey, at Grade 5 65.1% of children in non-government schools successfully read the Grade 2 story and 39.8% did division. In government schools, only 44.2% read the story and 22.7% did division.¹⁴

In both India and Bangladesh, national governments adopted education policies in the previous decade to increase dramatically primary school completion (recall Figure 2). In India, the consequence has been a significant post-2010 decline in all-India ASER reading and division results and an increase in the gap between government and non-government school outcomes (see Figure 4). There are multiple Indian non-government school types,

¹⁴ The all-India results reported in Tables 3 and 4 are weighted averages of government and non-government schools.

ranging from elite high-fee private schools to low-fee private schools, NGO schools, and madrassas. The majority of students in non-government rural Indian schools attend low-fee private schools. Not surprisingly, over the decade, the share of students in non-government schools doubled, to approximately 30% (Wadhwa 2019).

The National Student Assessment (DPE, 2018a) provides some results for Bangladesh on government versus non-government reading and arithmetic outcomes over the previous decade, but interpretation of the NSA results is difficult. There is indirect evidence that the trends in Bangladesh and India are similar. One piece of evidence is that the trends in students opting for non-government schools (most in low-fee private schools) are similar in the two countries (DPE, 2018b).

A second indirect piece of evidence is that the World Bank “learning poverty” rate for Bangladesh is similar to that in India. In 2021, the WB released an index of learning poverty (World Bank, 2021). This statistic is defined as the share of children at the upper primary school level (ages 10 - 13) who do not complete the primary cycle plus the share who complete the primary cycle but cannot read at a basic level (such as the Grade 2 story used in ASER surveys). In both India and Bangladesh, the World Bank estimates that of 100 children about 20 do not complete the cycle and, among 80 who do complete, about 40 cannot read at a basic level. Based on 2017 data, the WB reports that in India 55% of children are experiencing learning poverty. Relative to India, learning poverty is slightly worse in Bangladesh, at 58%, and considerably

worse in Pakistan, at 75%. By contrast, in Sri Lanka the rate is 15%. In a supplementary report published by the World Bank, UNESCO, and UNICEF (2021, p.5), the estimated increase in learning poverty in low- and middle-income countries, due to the pandemic, has been serious. It may have increased from about 50% to 70%.

On the assumption that 2018 learning outcomes in government schools are similar in Bangladesh to those in India, Bridge schools are out-performing government schools in the two countries. Based on the 2018 ASER survey, non-government schools outperform the Bridge school reading score, but not the division score. A more realistic comparison would require controls for family characteristics. In both countries, the majority of students in non-government schools attend low-fee private schools, and their families typically enjoy incomes above incomes of Bridge student families.

Explaining survey outcomes

In analyses of surveys such as ours, several factors are commonly found to be associated with better student learning. Figures 5 and 6 illustrate the higher probability of Bridge students’ ability to read the story and do division, conditional on such factors:

gender: Typically, by Grade 5 girls are more likely to be able to read than boys. Conversely, boys are more likely to do basic arithmetic. The Bridge survey is consistent with these results: 55.9% of girls successfully read the story,

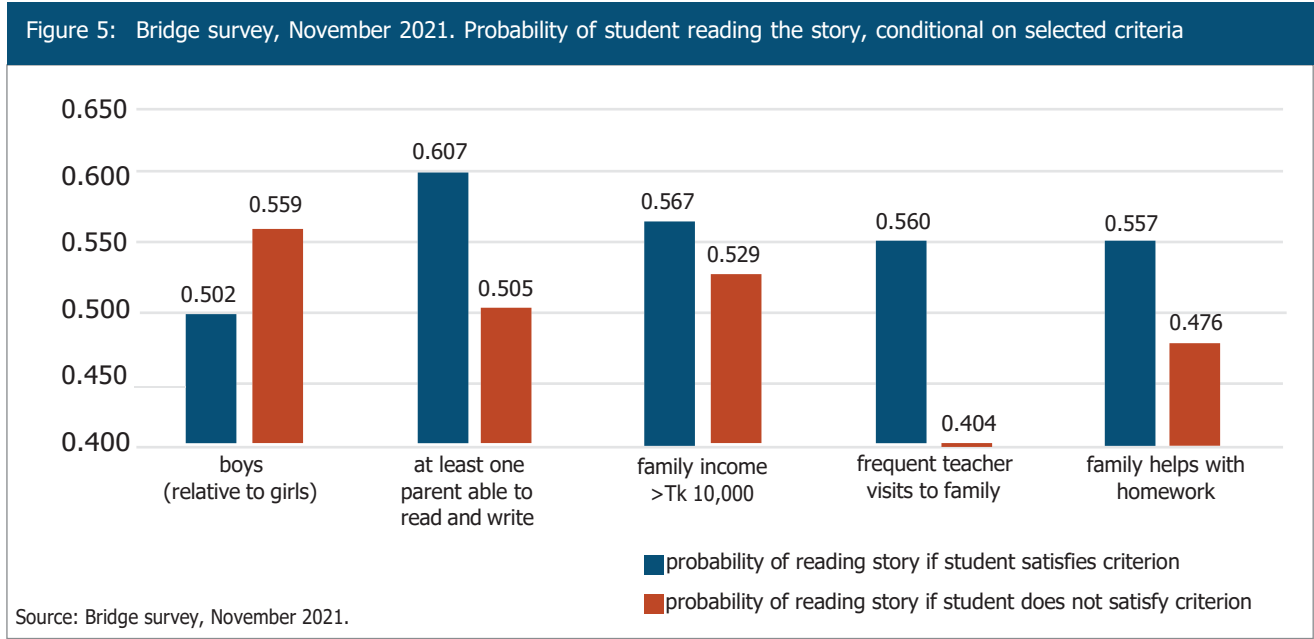
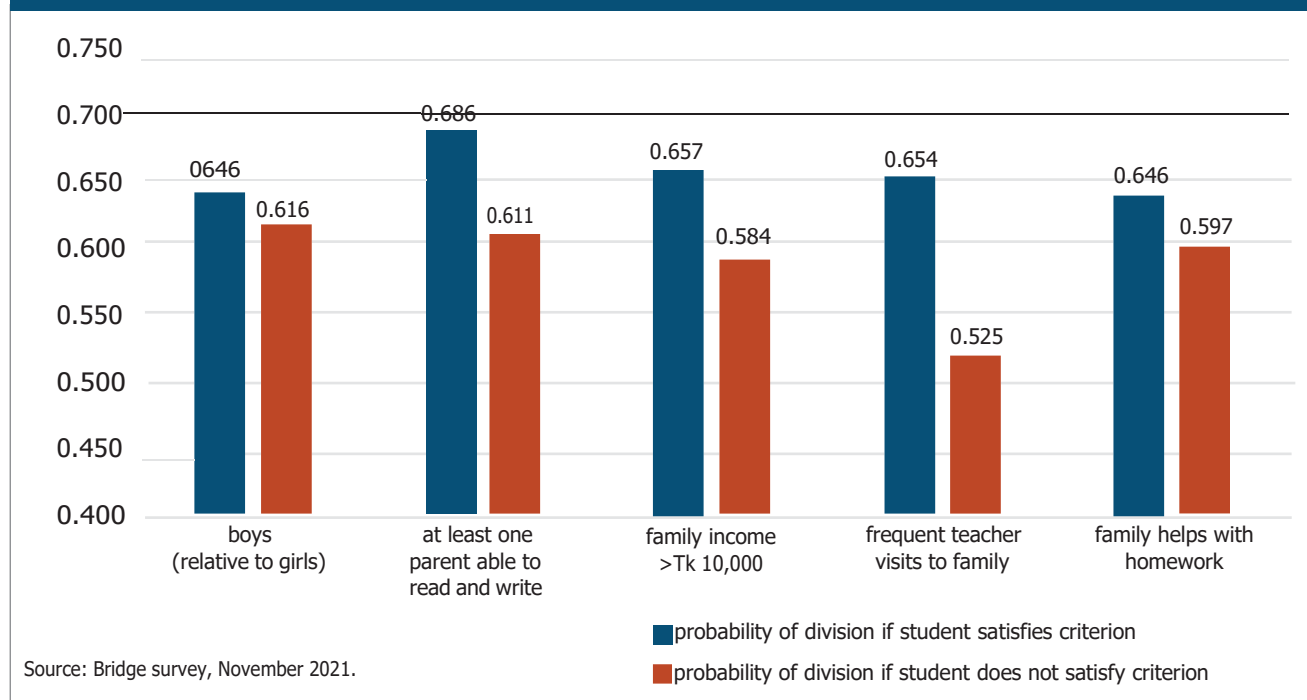


Figure 6: Bridge survey, November 2021. Probability of student doing long division, conditional on selected criteria



whereas 50.2% of boys did so. In terms of arithmetic, 64.6% of boys successfully completed the division problem, whereas 61.6% of girls did so (see Q45).

parent literacy: Students are more likely to be able to read the story and do division when at least one parent is able to read and write (see Q12).

family assistance with student's homework: Family help in student homework is a factor consistently associated with better student outcomes (see Q40).

frequent contact between teacher and family : The extent of teacher contact with students' families has a dramatic impact on student outcomes. In our survey, when the student's teacher contacts the family either daily or weekly, the student's probability of being able to read the story and do division is dramatically higher than families in which the student's teacher undertakes less contact. (For more detail, see summary of responses to Q35-Q38.)

In Appendix 2, we show the results of simple multivariate regressions that control for the above factors. Most factors are statistically significant (at varying levels of significance) in at least one regression. By far, the most significant factor, significant in both regressions, is frequency of teacher/family interaction. In addition to the teaching undertaken when a teacher contacts a family, teacher/family interaction may be a proxy of overall school quality. The ability of at least one parent to read and write is

significant in assessing probability of ability to read, but not in terms of doing division. Monthly family income above Tk.10,000 is highly significant in both regressions. Approximately 15 percent of families engage a paid tutor. However, the presence of a paid tutor has no significant effect on ability to do division; it has a modestly significant effect on ability to read.

We note the large variation, by upazila/thana, in student ability to read the story and do division. Table 5 summarizes reading and arithmetic outcomes in 13 (those having at least 30 respondents). Figures 7a and 7b illustrate the geographic location of the 13 sub-districts. The ranges are similar: ability to read the story ranges from 34% to 85%, ability to do division from 35% to 89%.

To some extent the variations across upazilas can be explained by the factors discussed. In the regressions (see Appendix 2 for details), we control for the factors discussed, and introduce "fixed effect" variables for children in urban (relative to rural) schools and in each of 13 upazilas. After controlling for the factors discussed and "fixed effects" in selected upazilas (discussed below), the urban/rural division is ambiguous. This divide displays no significant difference with respect to children reading the story in urban versus rural schools; however, students in urban schools fare significantly worse than those in rural schools when doing division.

TABLE 5: Share of respondents able to read story and do division by selected upazilas/thanas

Selected upazilas/thanas	Total, Students sampled	Able To read story	Able to do division
	Count	Percent	
Bakoliya	47	53.2	80.9
Bayazid Bostami	35	71.4	65.7
Gowainghat	142	33.8	35.2
Kalmakanda	59	84.7	88.1
Kamrangirchar	169	43.8	60.4
Lalmohon	68	77.9	88.2
Pahartali	35	65.7	60.0
Patiya	97	58.8	88.7
Rupganj	88	37.5	47.7
Shahjadpur	107	49.5	50.5
South Sunamgon	96	66.7	62.5
Sunamganj sadar	39	66.7	69.2
Tahirpur	34	50.0	70.6

After controlling for all other factors in the regressions, the probabilities of students in Kalmakanda and Lalmohon able to read the story are over .35 (or 35 percentage points) higher relative to typical upazilas. The probability of students in these two upazilas able to do division are higher by 0.25 (or 25 percentage points). On the other hand, the probability of a student in Gowainghat able to read the story is about .10 (or 10 percentage points) lower than in typical upazilas, and the probability of doing division over .20 (or 20 percentage points) lower.

We do not have satisfactory explanations for these large upazila-level variations. Among our recommendations is close examination of the more successful upazilas. What are the schools and managers in high-performing upazilas doing right? Conversely, what can be done to improve outcomes in upazilas with weak outcomes?

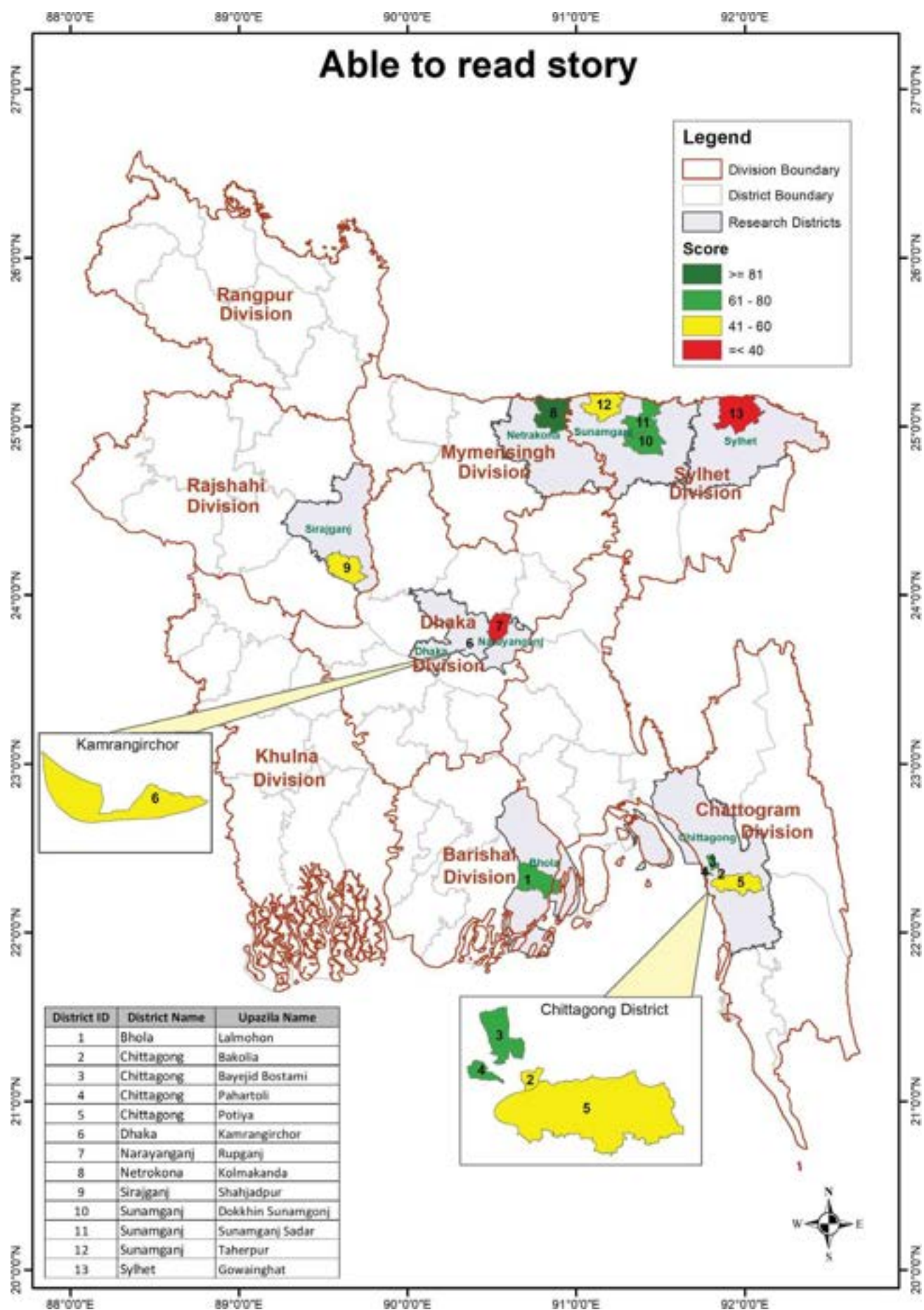
Throughout the world, it is common to find urban students performing better than rural students across the board, usually for reasons of having greater access to educational resources. But the tendency is not uniform. In many instances, children in rural areas may have higher levels of community cohesion and greater access to parental, peer, and community encouragement. Hence, superior cohesion may lead to rural exceeding urban results.

In addition to community cohesion and family conditions, geographic regions may have large differences in learning outcomes, due to overall quality of school management. The situation of indigenous students in high-income countries is somewhat similar to that of low-income students attending Bridge schools. An example is large regional differences in education outcomes among indigenous students in Canada (Richards et al., 2010; Anderson and Richards, 2016). In some Canadian schools, the gap between outcomes of indigenous and non-indigenous students is small; in other schools, the gap is large and cannot be satisfactorily explained by socio-economic differences. School management, teacher quality, and school system management matter. There are similar results in comparing native American Indian results across US states.



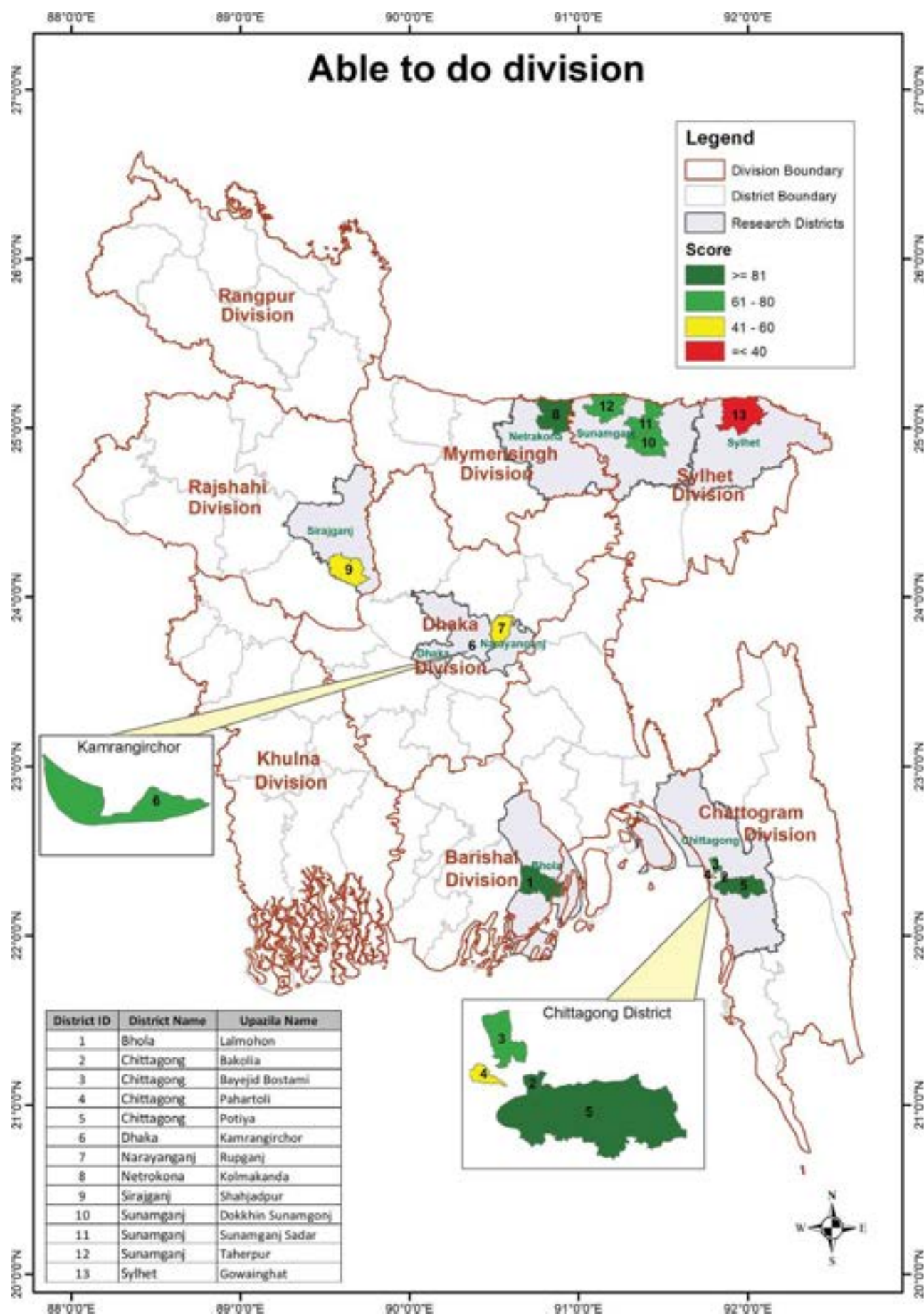
NUSRAT IS ONE OF THE STUDENTS OF BRAC BRIDGE SCHOOL IN SAVAR, BANGLADESH. During the pandemic when the schools were closed, her teacher conducted classes over the phone and also visited her home every week to follow up on her studies. CREDIT: © BRAC

Figure 7a: Ability to Read Story, by selected upazilas/thanas



Note: We acknowledge the contribution of Md. Arshad Hussain. He prepared the above map.

Figure 7b: Ability to do division, by selected upazilas/thanas





A photograph of a woman and a young boy standing in front of a building with a corrugated metal roof. The woman is wearing a yellow headscarf and a yellow patterned dress, and the boy is wearing a blue patterned shirt and jeans. They are both smiling at the camera.

CHAPTER SEVEN

WHY BRIDGE WORKS

PHOTO © BRAC

THE PROGRAMME AND STUDENTS in the Bridge Programme are successful for five reasons: (1) curriculum and materials, (2) teachers, (3) daily monitoring and evaluation, and the commitments from both (4) students and (5) their families.

1. Curriculum and materials

The students are on average one or two years older than non-Bridge students at their grade level. In a typical school, the student would be age 6 if entering Grade 1 or age 10 if entering Grade 5. Bridge students range in age from 8 to 16, but average 11.6 years. However, 52% of the Bridge students are 12 and older (Q44). Because the typical Bridge student is more mature, the curriculum's content and sequencing has been altered to fit the Bridge student's age and experience. The difference is substantial and important. Work books are universally and uniformly available for each subject. Every student has six books with him/her every day.

In both arithmetic and reading, the Bridge curriculum has been truncated to fit a pupil with more motivation,

diligence and need for instantaneous evidence of progress. Curricular materials have been re-designed, and concentrate on skill routines necessary for progress. Each lesson is posed, practised, and reviewed. New lessons are introduced with a tangible rhythm. Review tests are routinized. The student, when advancing quickly, is never far from being reminded of basic lessons learned at the beginning. Bridge schools offer supplementary reading materials to enhance children's reading skills. Mini libraries, reading corners, and wall magazines are a few activities that boost reading skills.

2. Teachers

Bridge teachers, all female, are drawn from those who have achieved higher secondary education (HSC) but who may be under- or unemployed. The home of most is within a short distance from the Bridge school to which they are assigned. Many have never taught before. There is ample evidence that long formal programmes of teacher certification are no guarantee of higher quality teachers

(Buddin and Zamarro, 2008). The Bridge decision to design a two-week intensive programme of teacher training, paired with consistent upgrading and intense supervision, has proven to be more than adequate. Monthly refresher training is followed by regular monitoring visits by school supervisors. Bridge teachers are highly motivated (Q35-Q38). Their remuneration is only one sixth that of a government beginning government primary school teacher. Bridge teachers feel honoured by having the chance to perform a needed and prestigious community role; they would like a larger salary, but many have reached the age of 30 when new teachers to government schools are ineligible from applying. Bridge teachers appear to be comfortable with the opportunities they have and the social appreciation with which they are justly rewarded.

3. Daily monitoring and evaluation

Student lessons are assessed daily. In addition, there are weekly and a summative assessment at the end of each month. The latter is systematically reported and discussed. The supervision mandate and techniques help the modestly educated Bridge school teachers maintain minimum standards. These standards include the presentation and mastery of all required lessons, with none skipped (as is common in other school systems). Bridge teachers know what they are teaching and why each lesson is important. It is not clear whether this 'ideal' was brought to the Bridge Programme by the teachers and supervisors, or whether it came as a result of the programme design. What is clear is that the teachers are trusted for their abilities, commitment and are given autonomous authority to lead classroom activities. While this trust is evident, also present is a system of verification to confirm whether they need additional help. This help can be instantaneous or await the monthly fresher course.

Bridge Programme managers are well respected, by both teachers and parents. Teachers and Programme Managers are held accountable for individual pupils who, for one reason or another, may fall behind or could cease attending classes. Carefully monitored, both teachers and Programme Managers concentrate their attention on any struggling student. It is a system of accountability formally characteristic of other school systems but rarely in such tangible evidence and discussed so openly as in the Bridge system.



JASMIN AKHTER, A TEACHER OF BRAC BRIDGE SCHOOL IN SAVAR, BANGLADESH, has ensured her students not only learn through books but also enjoy their lessons through various activities. She has been teaching for the past 14 years in BRAC schools. Credit: © BRAC

It is typical of educators to mention 'fun' as being part of curriculum strategy. Managers explicitly described 'fun' in the BRAC central office. Fun is difficult to validate and quantify - but we tried.

When asked why they send their children to a Bridge school, 46.3% of the Bridge parents mention that the school 'takes good care of my child'; and 56.1% say because the school was 'friendly and caring' (Q32). Students were asked two questions relevant to 'fun'. They were first asked about the school that they may have attended prior to being a Bridge student (Q49). Twenty-two percent mentioned that they 'did not like the previous school'; 21% mentioned that the previous school was 'not supportive'; 9% mentioned that teachers were 'not helpful'.

When asked about the Bridge school, the students had a quite different set of perspectives. Forty-two percent said that the thing they liked best was 'the teacher', playing games or co-curricular (cultural) activities. Another 46% said they like "learning new things", 'math' or 'reading' (Q54). These responses are genuine signs of a Bridge teacher's effectiveness.



PHOTO © BRAC

4. Students

Behind every successful school and school system lies one determining factor and that is the students. Many characteristics influence a student's achievement - health, family resources, influence of peers, natural aptitude. But above all is the desire to learn, the willingness to struggle in a classroom, the enthusiasm about sacrificing other interests. About Bridge students, two things are immediately obvious. The first is poverty in family resources. Forty-three percent of the parents report that the normal availability of food is deficient (either always or sometimes); 37% share their toilet with other families; 48% have only a wood-burning stove with which to cook (Q16, Q25, Q26).

In many instances, children from low-income families are found to perform worse in school because of the physical challenges of poverty.¹⁵ This does not seem to be

¹⁵ Since publication of the Equality of Opportunity Report (The Coleman Report) in 1966, large scale surveys of academic achievement have found that influences from the home environment have been greater than influences from school quality (Equality of Opportunity Report, 1966). But for the last three decades, this conclusion has been challenged by including information from the environments in non-OECD countries, in which the desire of pupils to learn is much stronger (Heyneman and Loxley, 1983; Heyneman, 2016).

the case with respect to students in the Bridge Programme. The second characteristic of Bridge students is that they exhibit a high and uniform desire to learn. One third claimed that their reason for being a Bridge student is 'to be educated', a remarkable sense of clarity for a teenager (Q52). Being a student naturally takes children away from other activities, such as necessary household work (Q33). When students are asked why they remain in the Bridge Programme, only 13% mentioned that it was because they 'could not be admitted to other schools'; 39% mentioned the low or free cost; 8% mentioned that it was 'better than their previous school' (Q55). When asked if you have ever thought about leaving the Bridge Programme only 8% said yes (Q56). These are indicators of student commitment. Students see the Bridge Programme as a possible avenue out of poverty, as social advancement, as a means to help make their families proud. In sum, this commitment is a rare and valuable resource for an education programme. It is like a fertile soil ready for a farmer to distribute seed.

5. Families

Families of Bridge students are poor. The median reported family income was 11500 Taka (US\$360).¹⁶ In the previous 24 hours prior to the survey, rice, lentil dahl and vegetables were common, but 75% had no meat, 79% no milk, and 65% no eggs (Q15). However, 'poverty' is an inadequate and perhaps misleading descriptor. Virtually all families of Bridge students had access to electricity; 48% had a television; and most importantly, 92% had a mobile phone (Q19, Q24, Q28). These are signs of being 'connected' to the wider world of communication, and of critical importance in understanding their role in the Bridge Programme.

A large part of the success of the Bridge Programme involves the total support from parents. For instance, though the Bridge student is quite capable of performing tasks that assist the family at home, 29% of the families do the child's work so that their schooling will not be interrupted, and an additional 60 percent do not ask the child to perform chores at home (Q33).

A large part of the parental support involves the connection between teacher and parents. When asked 'how often does the teacher contact you' 43% responded that contact was daily; another 38% responded that contact was weekly; thus 81% of parents are in contact with the teacher

¹⁶ The US equivalent is calculated using the World Bank purchasing power parity exchange rate, US\$1 = Tk.32.

either daily or weekly (Q38). By comparison to other school systems, whether in high or low-income countries, this level of teacher-parent contact is unprecedented.

Ninety-five percent of parents mention that the teacher helps by preparing parents to monitor student homework (Q37). Teacher/parent contact is in person or by mobile phone. Thirty-eight percent of the Bridge student families report that the student's father or mother regularly help with homework. In only 26% of families can at least one parent read and write (Q12). This raises the question, how can parents help their Bridge student. The answer seems to be, parents monitoring whether the homework is completed in a timely manner. We emphasize that the connection between teacher and parent and teacher and student is not through the internet. Only 18% of the cell phones in family homes have access to the internet (Q29). For the most part, the digital connection is through traditional mobile phone service, available to nearly all.

Implications

The Bridge Programme successfully allows students, who have been away from school, to re-enter and complete the primary school cycle 20% faster than the normal cycle. Bridge has been able to do this during the time of a pandemic in which face-to-face learning in schools was not allowed. Schools in Bangladesh were closed for more days, for example, than schools in Madagascar, Nepal, Liberia, and Afghanistan (UNICEF, 2021-22, p.6). We know that teachers who received specialized training focusing on learning loss problems had students with fewer learning loss problems (Haser, Dogan, and Erthan, 2022). We know too that learning loss has economic and cognitive ramifications.¹⁷ In one estimate from Mexico, learning loss ranges from 0.34 and 0.45 of a standard deviation in reading and between 0.62 and 0.82 of a standard deviation in math. This in turn, results in an increase in 'learning poverty' due to COVID by 25% in reading and 29% in mathematics (Hecia, Vergara-Lope, Velasques-Duran, and Del Campo, 2022).¹⁸ We also know that these losses will have a deleterious effect on incomes of both individuals and nations. In one estimate, the loss

¹⁷ These were the focus of eleven papers in a special issue of the *International Journal of Educational Development* (Reuge et al., 2021).

¹⁸ 'Learning poverty' is defined as the share of children at the upper primary school level (ages 10 - 13) who do not complete the primary cycle plus the share who complete the primary cycle but cannot read at a basic level.



MAHIN HASAN, like many other BRAC students, comes from a low-income family, and is one of the first ever persons in his family to go to school. © BRAC

to individuals will be a decline in lifetime earnings by 3%; for nations economic growth will decline by 1.5% (Hanushek and Woessman; 2020).

Are there implications from the Bridge Programme in addressing the larger dilemmas of the post-COVID education lock downs? The experience of Sobral (a school system in Brazil) is worth noting. In 2001, 40% of the children in Sobral could not read at all; in 2015 they scored the highest in the country. What happened? According to one analysis:

Sobral focused obsessively on making sure that small children can read. The city determined that every pupil would master basic literacy before entering third grade. Examiners began listening to all children read aloud.... Teachers earn bonuses if their pupils hit minimum targets. Lesson plans ensure that no teacher need start a class unprepared. Every teacher spends a day each month in training. ...The beauty of Sobral is that they do the obvious things very well. The city has a dogged willingness to implement what the evidence says works (Economist, December 18, 2021).

Bridge has reduced the detrimental cognitive effects of being away from school for an extensive period of time. The question arises, do the reasons for its success hold potential for adjustment as school systems re-open. The cognitive effect of dropping out and being pushed out is identical. It seems sensible for other school systems to assess the ability of Bridge to offset these effects. They too could provide opportunities for their students to catch up before being re-integrated into their former grade. The lessons from Bridge are a good reason for further pilot projects.

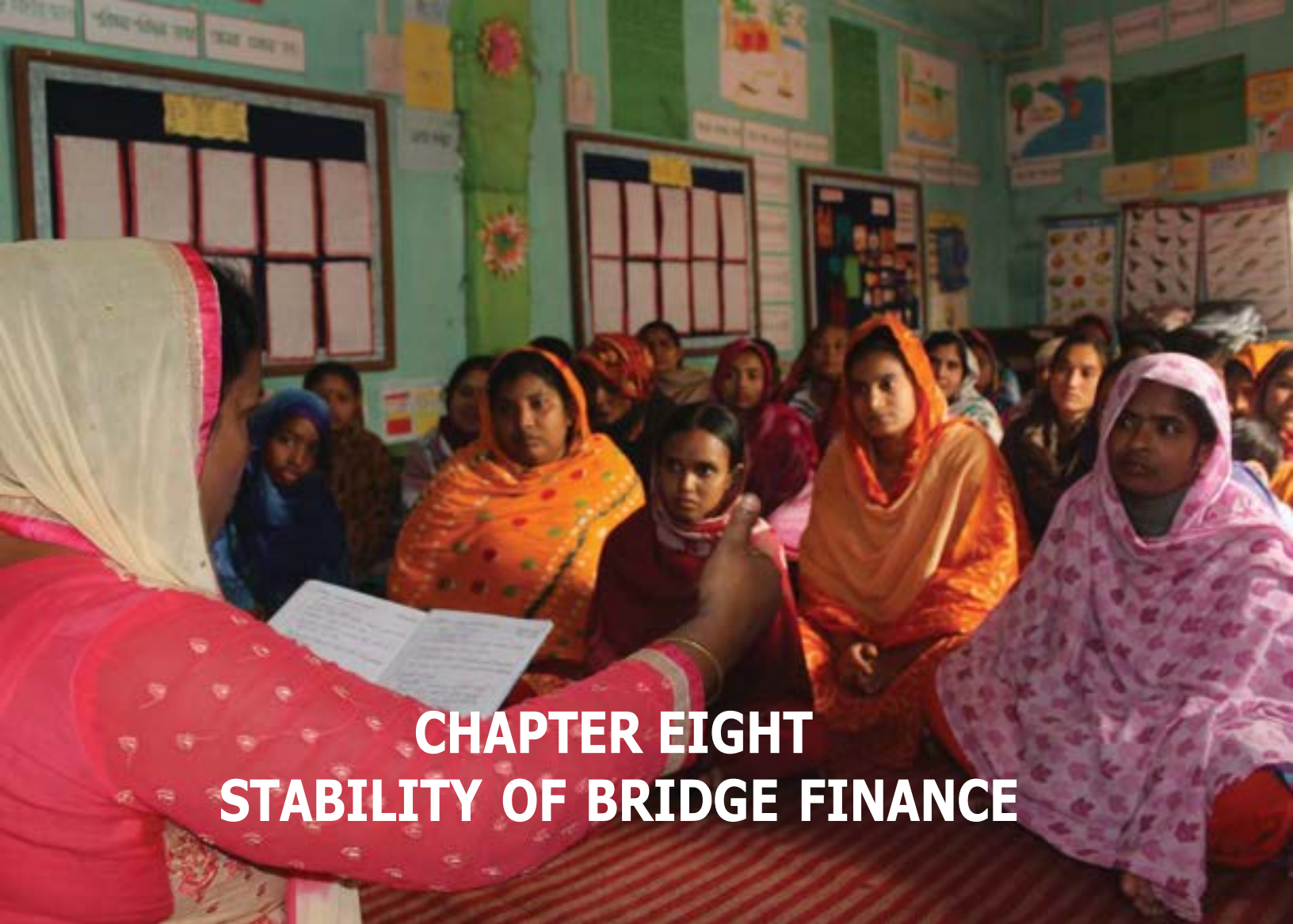


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CHAPTER EIGHT

STABILITY OF BRIDGE FINANCE

Academic and international aid agency monographs

Because COVID shut down economies worldwide, high-income countries have allocated increased resources to support their domestic social safety nets and simultaneously have decided that this domestic spending should be (partially) offset by reduced international aid. In addition to the financial shock on donor recipients has come a new questioning of the purpose of foreign aid to education. Serious observers have called for a review of the ‘architecture’ of aid. Some of the call has appeared in the pages of the *International Journal of Educational Development*. (One of us, Stephen Heyneman, is the Chief Editor of IJED.)

Nicholas Burnett (2019, p.26), the former Assistant Director General for Education at UNESCO, concludes that, “UNESCO has become so weakened ... by its internal politicization and inadequate budget, that it is no longer the respected international voice on education.”

He continues: “The [aid] architecture is not political enough. Each agency pursues its own course. Yet politics is, in the trite but true phrase, the art of compromise. What is needed is an opportunity for agencies (and their member countries) to sort out their differences, to agree on priorities, to agree on who will do what, to agree on funding and the like. Yet there is no forum for such a political discussion...”

Keith Lewin (2020), a senior professor at the University of Sussex, has undertaken research in many countries (including Bangladesh). In his recent IJED article, he concludes, “The architecture and goals of external assistance need to change to focus on making better use of the resources that are available through much increased efficiency and effectiveness, and on ensuring domestic revenue [in host countries] is increased.”

Girindre Beeharry (2021), a senior global education advisor for the Gates Foundation, argues that foundational

literacy and numeracy should be a very high international priority,

because [they are] critical to any meaningful progress on the wider Sustainable Development Goal (SDG4) agenda. [They are] also concrete and measurable enough to be both actionable and provide a much-needed metric against which to hold ourselves collectively accountable ...

Until very recently, attempts to prioritize have primarily come from bilateral aid agencies. USAID's 2011 education strategy (USAID, 2011) had a sharp focus on early grade reading - the more recent strategy for basic education is more expansive in its ambitions for young children, with early childhood education, numeracy, and social-emotional skills featuring alongside literacy (USAID, 2018). And the UK's FCDO [UK's Foreign, Commonwealth and Development Office] has declared various areas of focus over the years, more recently girls' education, disability, and learning. Despite trying hard to nudge multilateral organizations to adopt their priorities, bilaterals' declarations of focus primarily affect their own programmes.

Beeharry's priorities are clearly consistent with BRAC education priorities. Note the emphasis on providing "a much-needed metric". BRAC is aware of the significant UK cut to education aid funding, which FCDO has rationalized by arguments made by Burnett, Lewin, Beeharry - and Crouch (see Figure 8 below).

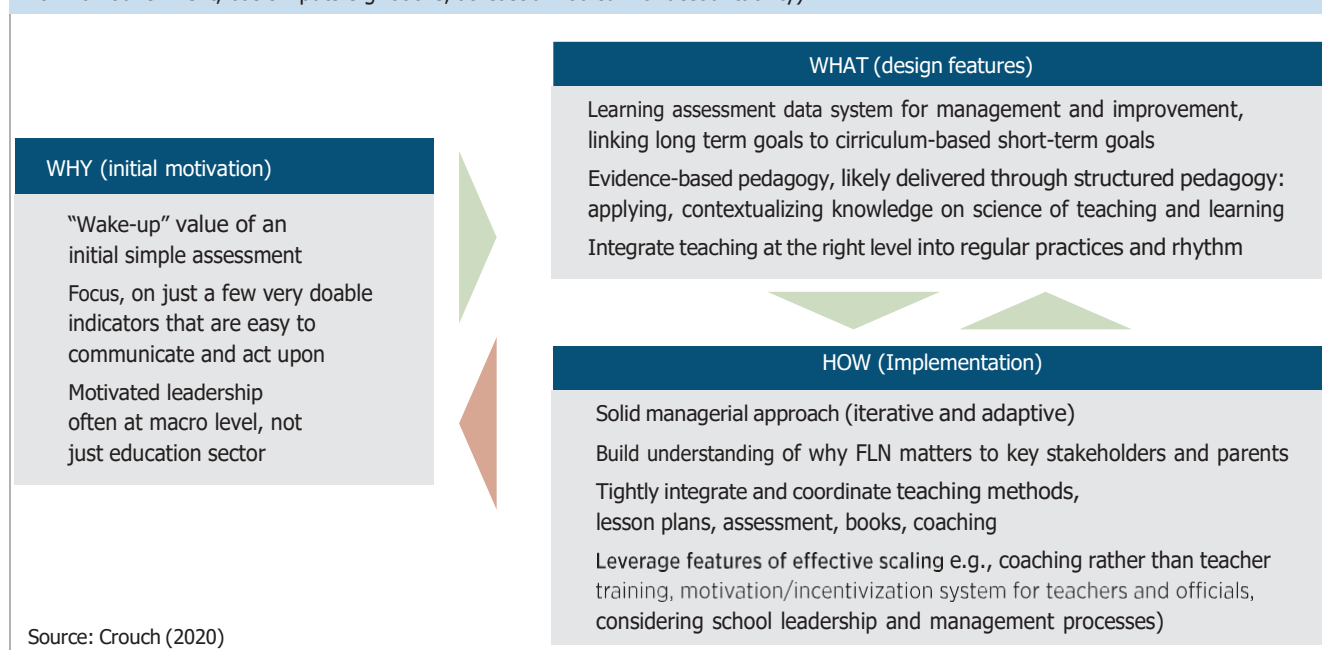
Beeharry makes reference to governance issues, and refers to the arguments made by Luis Crouch (2020), Chief Technical Officer of the International Development Group of RTI, a large US research institute. We summarize Crouch's conclusions on the necessary conditions for school systems to solve the "education crisis":

- the need for committed political support from the relevant government responsible for regional schools. (Beeharry briefly discusses Sobral, a case discussed by Crouch and discussed in the previous chapter. Crouch analyzes in detail its dramatic education outcome improvements since 2005.)
- the willingness of political leaders to confront entrenched dysfunctional interest groups in the education system;
- presence of professional system managers able to make effective strategic decisions that advance student learning outcomes;
- an "obsessive" concentration on improving a few simple education outcomes that are easy for all to understand;
- manage schools in a manner that respects teacher professionalism.

In the short run, this discussion of change in international aid "architecture" could adversely affect BRAC

Figure 8: Lessons from case studies

Pre-conditions/other features: Some initial support from school agency, bureaucracy ready to take advantage of random opportunities, basic pre-conditions in place (e.g., comfort and sanitation, control of malnourishment, basic inputs e.g. books, at least a modicum of accountability)



– and the Bridge project in particular. There are two reasons to suggest that doubts being expressed on present Official Development Assistance (ODA) will not affect medium-term BRAC education funding:

- The discussion may apply to donor relationships with governments that have displayed long-standing deficiencies in efficiency and effectiveness, but not to organizations with autonomy from governments. BRAC’s NFP programming has demonstrated its cost-effectiveness over a quarter century.
- Donor cuts may apply to programmes that are local and non-transferable, and less to programmes that succeed in bringing marginalized children into school with a reasonable probability of completing

the primary cycle. BRAC NFP and Bridge schools are providing a significant “pilot” response to a global problem. The Bridge Programme in particular may well fit into this latter category. Historically, BRAC non-formal primary schools have benefited from non-government foundation support. The renewed search for effectively managed school systems may well enable BRAC to realize continued donor support.

In academic literature on education, a major contemporary theme is that interest group competition *within* the education sector of many developing countries has generated a stable equilibrium – an equilibrium, however, at an unsatisfactory low level of student learning (Bruns

TABLE 6: Agents in School Systems, Illustrative Activities

Agents	Activities promoting student learning	Activities poorly aligned with student learning
Teachers unions	Pursue teacher certification standards based on best practice; Adopt new teaching techniques based on evaluation of outcomes; Contribute to design of tests and assessments of student learning. Contribute to curriculum design.	Accept conventions whereby applicants to teaching positions pay officials and/or politicians for positions Pursue salary gains well beyond international norms; Oppose professional evaluation Engage in extensive private tutoring (for pay) of students in their classes
School principals	Coordinate student and teacher obligations; Address major learning problems in school Play a role in hiring and promotion of teachers	Engage in favouritism, (e.g., adjust student assessments in exchange for favours) Leak answer to exam questions.
Education ministry and regional	Assure quality of school infrastructure; Assure timely supply of texts and other teaching material Establish school funding formulas that assure reasonable equity in funding of schools based on student numbers and special needs students.	Engage in rent-seeking by, for example, insisting on payment for performance of services
Politicians	Determine central budget priorities that assure ability to finance quality schools	As with officials, politicians may engage in rent-seeking
Employers	Support professional high-quality schooling; Organize apprenticeship programmes for upper secondary students	Lobby for unduly low taxes, thereby assuring weak schools
Suppliers of educational inputs (e.g., textbooks, school buildings)	Provide good quality inputs at reasonable cost	Abuse contracts by, for example, use of inferior building supplies
Non-government schools (private, NGO and religious)	NGO and religious schools may cater successfully to education needs of student groups poorly served by government schools and whose families cannot afford fee-based schools Private schools may generate superior quality education for those able to pay	Rely on information asymmetry to attract students, and provide inferior teaching that does not meet curriculum expectations
International donors	Provide stable funding based on well defined education goals	Adjust funding arbitrarily; Choose projects based on political pressure from diaspora in donor country

Source: adapted from World Bank (2018, p.14)

& Schneider, 2016; Hickey & Hossain, 2019; Kingdon et al., 2014; Ramachandran et al., 2018). Many senior politicians and administrators in South Asia appreciate this equilibrium to be unsatisfactory, but dislodging it, they conclude, is currently politically unrealistic. The World Bank devoted the entire 2018 World Development Report to the importance of dislodging low-outcome equilibria. Table 6 is an adaptation of the World Bank summary of the positive and negative potential goals pursued by major interest groups that, in some countries, undertake to preserve an unsatisfactory equilibrium.

With the exception of Sri Lanka, South Asian government school systems are “stuck” in their respective low-outcome equilibria. Hopefully, over the coming decade public opinion will become sufficiently dissatisfied with this status quo that governments improve government school learning outcomes.

Meanwhile, the existence of large-scale pilots such as Bridge are a valuable illustration of what can be achieved - at low per student cost - if the five key elements of a school system coincide: 1) the curriculum is appropriate; 2) teachers enjoy professional respect and sufficient autonomy to perform well; 3) monitoring and supervision by central agencies support teachers and avoid “rent seeking” activities; 4) parents are engaged in students’ learning; and 5) students are motivated to learn.

Interviews with the development agencies

Department for Foreign Affairs and Trade—DFAT, Australia

The Education section of the Department of Foreign Affairs and Trade considers Bridge schools as an innovative approach, primarily because it cuts about a year of schooling and offers the same primary education package to children as in the traditional BRAC NFPE schools. This is a good selling point to parents whose children have completed at least a year in school and who do not want their children to restart from Grade 1. Relative to other NGOs, BRAC has a big advantage due to its field offices throughout the country, and has the ability to expand services nationwide.

BRAC’s Bridge school originated in its traditional Non-Formal Primary Education programme (NFPE). What DFAT likes most about Bridge, and what makes it different from traditional NFPE school, is its four-month

bridging programme that reinforces the foundation for children to resume their education. DFAT strongly feels that parental involvement in Bridge school is effectively contributing to students’ attendance, teachers’ accountability and improved learning outcomes.

DFTA has not done any cost-benefit analysis of its contribution to BRAC and Bridge; however, it believes Bridge to be a cost-effective education model with huge potential for scaling up. Education enjoys the major share of DFTA’s fund allocated through the Strategic Partnership Agreement (SPA) to BRAC. Australia is in its third phase of SPA with BRAC. DFTA’s Covid Development Response Plan has three programmatic pillars: health, economic development and resilience, and stability. In Bangladesh, DFAT has opted out from health since 2014, mainly due to a budget cut. DFTA supports a skills development programme under its economic development and resilience pillar; education falls under its stability pillar. Based on the budgetary allocation, education remains at the top of DFAT’s priority list. Annually, DFAT Bangladesh mission receives ~\$30 million of which \$17 million goes to BRAC under the \$85 million SPA for five years.

BRAC Education Programme is at a critical juncture. Development assistance to non-state actors in Bangladesh is shrinking. Recent transition of BRAC leadership at the top of the BRAC education programme as well as overall BRAC management may require time to bring all programmes up to speed. Fortunately, BRAC has a very robust cadre of field staff to implement its activities at any scale.

The Foreign, Commonwealth, and Development Office—FCDO, UK

The British Government has been one of the largest bilateral donors in primary education in Bangladesh. For two reasons, the Foreign, Commonwealth, and Development Office (FCDO) of the British Government is now keen on shifting its focus from primary. First, the Government of Bangladesh is now funding ~95% of the total primary programme budget from its own treasury. Second, the fourth Primary Education Development Programme (PEDP 4) did not include any significant quality improvement measures that FCDO has been advocating for several years. Several development partners agreed with FCDO on the need for quality improvement measures. However, the Ministry of Primary and Mass Education (MoPME) decided not to include any such measures. FCDO strongly believes that



PHOTO © BRAC

these elements are crucial for children to acquire foundational skills (literacy and numeracy) at their grade level.

FCDO considers Bangladesh as a transitioning country that aspires to reach upper-middle income status from its present low-middle income status and wants to allocate resources for improving secondary education, which is necessary in meeting this economic goal. (Between 2000 and 2020, Bangladesh more than doubled its real inflation-adjusted per capita GDP.) FCDO concludes that MoPME is resisting appropriate interventions to improve learning gains at the primary level. Further, FCDO perceives the GOB making a strategic shift from formal primary education to need-based technical training under the Directorate of Secondary and Higher Education (DSHE). However, FCDO will continue supporting non-formal education initiatives provided by non-state actors like BRAC.

Traditionally, the British supported BRAC through an umbrella Strategic Partnership Agreement (SPA) that offered BRAC the authority to distribute British fund to health, education, and other social sectors. Due to the recent restructuring in FCDO's headquarter, the FCDO mission in Bangladesh may not allow a similar SPA, but its commitment to support marginalized primary school age children means that some financial support will be extended to BRAC to operate its education programme.

FCDO is in favour of a "catch up" education model to support children affected by COVID pandemic. The FCDO "catch up" model is similar to the Bridge school model, but proposes a longer 'bridging' course. Bridge offers a four-month bridging course whereas the FCDO "catch up" model will adopt a 10-month bridging programme. FCDO would like to allocate sufficient resources to BRAC to benefit 130,000 children.

FCDO emphasizes that a strong evidence base of any intervention will facilitate potential partnerships between state and non-state actors. There are examples in Bangladesh of evidence-based reform. It took 10 years for the formal primary education system to adopt pre-primary school, but, finally, it has now happened. Persistent effort supported by evidence helped mainstream the pre-primary education intervention. Similarly, the bridge approach has a huge potential in Bangladesh and beyond. The COVID pandemic has left millions of children behind in their normal learning curve; many of these children may have already been thrown out of school.

Global Affairs Canada (GAC)

Global Affairs Canada has been supporting BRAC through a similar SPA as has DFAT. This strategic partnership is an umbrella agreement similar to ‘grants without strings’ arrangement where BRAC has the liberty to allocate resources to its priority development sectors: education, health, women empowerment, etc. The ongoing SPA is for C\$35 million.

GAC officials periodically conduct site visits to see BRAC’s development activities in the field. Although the Bridge Programme is entirely funded by Educate A Child, GAC officials have visited Bridge school sites and met school communities. GAC officials fear that the COVID pandemic will lower overall primary enrollment and primary cycle completion. GAC officials agreed that education interventions like Bridge have the potential to address this dropout issue in Bangladesh and maybe in other countries too.

United States Agency for International Development—USAID

Historically, USAID maintained its relationship with the Government of Bangladesh as a bilateral development partner and never participated in any of the PEDPs. USAID’s education portfolio is also relatively new in Bangladesh compared to the other major development partners. USAID’s education journey in Bangladesh started with a *Basic Education Policy Support Studies* during GOB’s transition to PEDP2 from the first PEDP. Since then, USAID maintained bilateral relationships directly through its discrete pre-primary and then early primary education projects. During the third phase of the PEDP, USAID supported BRAC with \$7.8 million for an early

grade reading intervention similar to BRAC’s NFPE model; however, the USAID component had a strong focus on working with Government Primary Schools in project implementation areas. USAID intended to broaden the scope for BRAC to work more closely with the Government of Bangladesh; unfortunately, this tri-partite initiative did not come into fruition.

Conclusion: Current Strategic Financing Trends in Bangladesh Primary Education

Adopting a compulsory primary education act in early 1990s contributed to rapid expansion of education provision. Both the public and non-state provision of basic education grew rapidly. Bangladesh is now enjoying 98.5% net enrollment rate in primary education sector. The Development Partners (DPs) supported the Bangladesh government initiatives through financial and technical support. DP support to primary education substantially increased in the 1990s. The first Primary Education Development Programme (PEDP) in Bangladesh was launched in 1999. After five years of implementation, the MoPME adopted a Sector Wide Approach (SWAp) to reduce duplication of efforts by multiple DPs, and harmonize all primary education interventions. DPs pooled their resources into a common account. This strategy was popularly known as PEDP 2. Bangladesh is now implementing the fourth phase of PEDP (2018-2023).

In recent years, the DPs’ contribution to primary education in Bangladesh has undergone a drastic reduction. This reduction has more severely impacted non-state actors like BRAC than the public education system. The size of the PEDP budgets has increased, funding coming mainly from the government’s own treasury. Bangladesh is now funding ~95% of its primary education sector programme with internal resources and borrowings from two multilateral banks (World Bank and Asian Development Bank). The bilateral DPs have reduced their funding for several reasons. First, Bangladesh has experienced substantial uneconomic development over the last two decades and can finance its present primary school budget without the DPs. Second, the GOB has deprioritized primary education reform, and favours allocation of development aid to needs-based technical education. Third, PEDP 4 has shut the door to Development Partners requesting proven early primary interventions that would enhance children’s foundational skills (literacy and numeracy).



CHAPTER NINE RECOMMENDATIONS

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WE DIRECT OUR RECOMMENDATIONS to key stakeholders concerned with Bangladesh primary education: to BRAC, to Qatar's Educate A Child Foundation, to the Government of Bangladesh, and to multilateral and bilateral development assistance organizations.

For BRAC

The value of student assessments and surveys of teacher/family relations

There are many education goals that cannot be measured by quantitative assessments. However, measuring student performance in the fundamental skills of reading and arithmetic is a necessary tool for making improvements in a school system. This assessment is best undertaken by independent agents in students' homes. We did not know if the government of Bangladesh would encourage an assessment of public vs non-public schools; hence, we decided to compare Bridge school performance with Indian rural schools. In addition to measuring reading and division learning outcomes, we posed many questions in our survey to learn more about student families and family/teacher relations.

Using the same ASER protocol as in India, the results from our random survey of 1600 Bridge students provide strong evidence that, 20 months into the pandemic and subject to school closures, Bridge schools outperformed all-India average results in the 2018 ASER survey conducted prior to the pandemic. Bridge students modestly outperformed Indian students in ability to read a short story (53% relative to 50%), and dramatically outperformed Indian students in ability to do division (63% relative to 28%).

We would, of course, like reading and division scores to have been higher, but the actual scores are encouraging given three major obstacles in Bridge schools: the learning loss associated with the pandemic; the disrupted learning experience of many Bridge students; the low income of Bridge families.

Five Central Bridge Characteristics

These Bridge achievements were due to five central characteristics: (1) effectively truncated curriculum and materials; (2) careful selection of highly motivated teachers; (3) daily monitoring and evaluation of both teachers and students; (4) students equipped with a high demand to learn, and (5) families willing to sacrifice to see their children complete school. All five are essential to understanding Bridge performance.

Analyze large variation in student outcomes among upazilas

The most troubling survey result is the large range, by upazila, in student outcomes. In both reading and division outcomes, the results in the best-performing upazilas are more than twice those in the weakest upazilas. It is well known that students in Bangladesh historically perform much better in some upazilas than in others. However, we were sampling among low-income families and expected less variation than among surveys of the entire student population. Control for family characteristics (primarily income and parents' literacy) does not explain much of the variation by upazila. We suggest BRAC education programme analyze carefully why in some upazilas performance is excellent, and what can be done to improve performance in weak upazilas.

Generalizing Bridge

In some form the 'Bridge Package' has potential for generalization. Our central recommendation for BRAC is to explore designs that might be appropriate to try, in suitable contexts, at different age/grade levels in divergent school systems, both public and private, and in contexts inside and outside of Bangladesh.

For Qatar Educate a Child Foundation

Mentioned throughout our report is that the Bridge Programme is not typical of non-formal education. Usual programmes for out-of-school children and youth offer a variety of vocational experiences in hope to improve their income-earning potential. Globally, we could find few programmes that enroll out-of-school youth and offer them an opportunity to learn enough to re-enter the grade they would have had, had they not left school. A generous contribution to the support of Bridge Programme comes from Educate a Child Foundation in Qatar. This foundation should be congratulated for two reasons. It focused on out-of-school children, a neglected target group. Second, it allowed the character of Bridge to be drawn from the BRAC environment without overlaying its character from pre-selected ideas. The combination of such an investment without inhibiting preconditions is rare.

For the Government of Bangladesh

It is unwise to compare apples and oranges. Similarly, it is unwise to suggest that government and BRAC schools can easily be compared. First is the issue of scale: BRAC (including Bridge) currently educates 126,193 primary school students and 3,260 secondary school students and its multi-purpose learning centres offer an educational platforms to over 1.3 million adolescent boys and girls; government schools educate 15 million in children in primary; BRAC operates 7779 schools; the government operates 63,000 schools; BRAC employs 7798 teachers; the government employs 319,000 teachers. But our experience in assessing the effectiveness of the Bridge Programme has led us to settle on one characteristic relevant for the government: flexibility implementation of education goals.

All public education has three elements: content (usually represented by the curriculum); financing (usually represented by tax resources); and delivery (the ownership and management of classrooms). What is not widely recognized is that successful public school systems do not require governments to supply all three elements. The only OECD country where governments provide no subsidies to well run non-government schools is the U.S.; all others allow and often encourage non-state or organizations to supply public education. Conditional on common curricula across school types, France, England, Canada, Australia, New Zealand, Japan and others use other organizations (churches, mosques and charities) for a minority of schools and teachers. This tends to allow additional flexibility than if all schools were subject to a single government ministry.

At the moment, public education in Bangladesh faces two significant challenges. Although enrollment is high, academic achievement is not. In addition, due to the pandemic all schools have been closed for much of the time since March 2020. No country has been successful at replacing face-to-face learning with a digital alternative. Hence, students in government schools have, almost certainly, experienced an important learning loss - the difference between what students would have learned, had there been no pandemic and schools had not closed, and what they have learned due to school closure.

The second challenge to the Bangladesh government has to do with the far-reaching new curriculum intended for implementation in 2023. This curriculum has many novel elements, but each requires a higher level of cogni -

tive skill and adaptability than would have been required by the current curriculum.

This is the circumstance in which experimentation is useful and, in some instances, required. It might be wise for the government to utilize non-state delivery mechanisms and monitor the learning results in preparation for the intended new curriculum. In this experimentation it might also be wise to emphasize one or more of the five elements that explain the success of the Bridge Programme. For instance, it might be useful to consider specialized schools as in the Netherlands; or support faith-based schools as in Ontario, Canada; or use multiple agencies as in the Republic of Korea. These non-government institutions can provide public education on behalf of the nation.

For multilateral and bilateral development assistance organizations

The performance of school systems in many countries fell short of the Millennium Development Goals in 2015. Realizing these goals may have been unattainable due to unrealistic original expectations in 2000. Higher domestic revenue was required to cover costs of realizing the MDG goals, no matter the selected aid scenario. Development aid was never going to be a substitute for adequate

domestic revenue and reform of inefficient institutional arrangements. A dislocation is evident between education priorities and new environmental challenges, demographic transitions placing new emphasis on the elderly, changing labour markets, and macro-economic deficits arising from the public expenditures necessary to offset COVID. The end result has, understandably, been ‘donor fatigue’ (Burnett, Lewin and Heyneman, 2022).

From the educational experience of having to close schools for months (in some cases, years at a time), combined with the fact that digital replacements did not operate up to aspirations, the world is now realizing that an educational tsunami has struck. Education building blocks are lying all around us in a heap. Nations are discovering that one cannot put pupils back into schools as if nothing significant has happened since spring 2020. Success stories are needed, but where are they to be found?

Bridge is a success, and Bangladesh could be a location for other successful innovations. The question is whether the five Bridge elements can be re-purposed through experimental scenarios. In pursuing such experiments, development assistance agencies are essential. They have the financial capacity to experiment, and the wherewithal to make progress - provided they appreciate the complexities of running school systems and measuring outcomes.

APPENDICES

Appendix 1: Survey Question Summary Tables

In the survey, we posed questions about family characteristics and teacher/family interaction. We here provide detailed results for the 1174 students in Bridge Grade 5 schools. For each substantive survey question, we have summarized responses.

Q12 Can at least one parent read and write?

yes	no	total
303	871	1174

Q15 How many times did your child and family eat the following foods in the last 24 hours?

Distributions of number of servings, by kind of food

servings	rice	daal	fish	milk	egg	meat
zero	0.003	0.304	0.138	0.785	0.646	0.744
one	0.007	0.277	0.275	0.173	0.272	0.162
two	0.308	0.347	0.427	0.027	0.059	0.068
three	0.680	0.070	0.159	0.013	0.021	0.024
total	1.000	1.000	1.000	1.000	1.000	1.000

Did child receive at least one serving of a protein source (daal, fish, egg, meat)?

yes	no	total
1155	19	1174

Q16 In thinking about money for buying food, is overall family income adequate for your family?

family always in deficit	family sometimes in deficit	family has enough	family has surplus	total
77	431	479	187	1174

Q18 Overall, how much money have you and others in your family earned in the last month, including wages?

<Tk.5000	5001-7500	7501-10000	10001-12500	12501-15000	>15000	total
54	122	272	225	213	288	1174

Q19 Do you have electricity in your home?

yes	no	total
1151	23	1174

Q20 Do you or your extended family own land?

yes	no	no answer	total
722			

Q21 If answer to Q20 yes, how much land does your extended family own? [decimals*]

top quartile	33
median	13
bottom quartile	5
average	43.0

* 100 decimals = 1 acre; 247 decimals = 1 hectare.

Q22 If answer to Q20 yes, how much homestead land does your family own? [decimals]

top quartile	17
median	8
bottom quartile	4
average	15.4

Q23 If answer to Q20 yes, how much arable land does your family own? [decimals]

top quartile	21.8
median	0
bottom quartile	0
average	31.5

Q24 Do you have television at home?

yes	no	total
564	610	1174

Q25 Do you have toilet shared with multiple families or separate [solely for your family]?

shared	separate	total
438	736	1174

Q26 Do you have gas burner shared with multiple families or separate [solely for your family]?

shared	separate	no gas stove	total
232	443	499	1174

Q27 Between gas cylinder and wood stove which one do you use?

	gas stove		
gas stove	and cylinder	shared stove	total
317	281	569	1167

Q28 Do you have a mobile phone at home?

yes	no	total
1075	99	1174

Q29 Do you use internet on your mobile?

yes	no	total
198	877	1075

Q30, How do you use your mobile?

calling and texting only	859
mobile with internet access	198
listen to FM radio	111
watch videos	58
access educationnal material	34

Q32 Why do you send your child to BRAC school?

school is free	995
BRAC provides quality education	982
school is friendly and caring	660
BRAC takes care of child	566
my child likes the BRAC school	543
my child has many friends at school	323
my neighbours send their children to BRAC school	226

Q33 How do you make up for your child's absence from household work?

husband and wife do child's chores	345
child does no household work	707
child works outside school hours	122
total	1174

Q35 Which statements apply to your child's teacher?

child likes teacher	707
teacher visits family home	423
teacher does not care about child	30
child does not like teacher	12
no comment	2
total	1174

Q36 Does teacher help parents to support child's homework?

yes	no	total
1115	59	1174

Q37 How does the teacher help parents?

preparing homework	853
mentoring/coaching student	61
tutorial support	337
teacher visits home	561

Q38 How often does your child's teacher contact you?

daily	weekly	bi-weekly	monthly	rarely	total
510	443	104	92	25	1174

Q39 After BRAC school, what do you hope your child will do?

continue to secondary school	1145
terminate formal education	10
pursue vocational training	154
arrange marriage for child	9
complete secondary school, then arrange marriage	29
commence employment	118

Q40 Family engagement in student's homework

father helps	143
mother helps	241
siblings help	546
neighbours help	124
other relatives help	116
home tutor helps	85
BRAC teacher helps	21
no help available	157

Q41 If you engage a tutor, how much do you pay?

	Tk.0 < fee		
no fee paid	< Tk.300	Tk.300 < fee	total
1010			
	85	79	1174

Q44 Age distribution of children (in Grade 5)

8	9	10	11	12	13	14
1	28	224	316	359	163	63
average age	11.6					

Q45 Gender of children

boys	girls	total
568	606	1174

Q47 Before attending BRAC school, did you go to another school?

yes	no	total
446	728	1174

Q48 If yes to Q47, what was your last grade in the other school that you left?

grade1	grade2	grade3	grade4	grade5	total
58	153	167	61	4	443

Q49 If yes to Q47, why did you leave your previous school? [children may give multiple answers]

Family migrated	67
Did not like that school	166
Economic/ Financial Problem	98
Not learning anything	63
Not supportive	156
Closed due to pandemic	25
Teachers not helpful	68
No Teachers	10
Teachers did not attend regularly	20
Other students bullied	6
Other children left	27
Don't know	27

Q51 If yes to Q47, what type of school did your child previously attend?

government school	251
madrassa	53
private significant fees	63
private no fees	49
kindergarten (low fee private school)	19
NGO school	44
total	446

Q52 Why are you a BRAC school student? [This and following questions posed to student]

Want to be educated	1037
Want to be with friends	352
Parents insist	473
Like the teacher at BRAC	578
Like various activities at BRAC	508

Q53 How would you rank the difficulty of each subject? [student ranks subjects]

	rank	bangla	math	english	science	social_science
most difficult	1	34	183	445	40	23
	2	22	247	279	72	35
	3	73	188	199	152	59
	4	83	172	100	192	190
least difficult	5	307	129	68	216	321
	6	611	211	39	458	502

Q54 What do you like most about BRAC School?

learning new things	914
learning to read	829
learning to do math	643
like teacher	779
like playing games	725
playing with friends	650
cultural activities	651

Q55 Why do you stay in the BRAC school?

better than previous school	410
low fees	109
no fees	914
it is within reach	692
could not get to other school	150
free textbooks	809
free stationery	888
story books available	594
school is fun	586
no answer	4

Q56 Have you ever thought of leaving school again? [leaving BRAC school]

yes	no	total
9	1163	1172

Appendix 2: Regression analysis

The following variables are used in the regressions.

Regression label	Description of variable	Definition of variable
Dependent variables		
story	Student can read grade 2 story	If child reads story, x=1; 0 otherwise
division	Student can do division	If child does division, x=1; 0 otherwise
Family and teacher/family interaction variables		
boys	Identify gender	If respondent is a boy, x=1; 0 otherwise
girls	Identify gender	If respondent is a girl, x=1; 0 otherwise
parents_read	At least one parent declares able to read and write	If either mother or father or both are able to read and write, x=1; 0 otherwise
frequent	Parents' estimate of frequency of interaction with child's teacher	If estimate is daily or weekly, x=1; 0 otherwise.
family_helps	Family members help with child's homework	If either mother, father, or sibling helps, x=1; 0 otherwise
overtenk_y	Family income is in top half of distribution, with monthly income over tk.10000	If income exceeds tk.10000, X=1; 0 otherwise
tutor	Family hires paid tutor for child	If family pays for tutoring, x=1; 0 otherwise
Fixed effect variables		
urban	Student attends urban school	if in urban school, x=1; 0 otherwise
Bakoliya	Student attends school in bakoliya	if in Bakoliya, x=1; 0 otherwise
South Sunamganj	Student attends school in south sunamganj	if in South Sunamganj, x=1; 0 otherwise
Gowainghat	Student attends school in gowainghat	if in Gowainghat, x=1; 0 otherwise
Sunamganj Sadar	Student attends school in sunamganj sadar	if in Sunamganj Sadar, x=1; 0 otherwise
Kamrangirchar	Student attends school in kamrangirchar	if in Kamrangirchar, x=1; 0 otherwise
Kalmakanda	Student attends school in kalmakanda	if in Kalmakanda, x=1; 0 otherwise
Bayazid Bostami	Student attends school in bayazid bostami	if in Bayazid Bostami, x=1; 0 otherwise
Lalmohon	Student attends school in lalmohon	if in Lalmohon, x=1; 0 otherwise
Pahartali	Student attends school in pahartali	if in Pahartali, x=1; 0 otherwise
Patiya	Student attends school in patiya	if in Patiya, x=1; 0 otherwise
Rupganj	Student attends school in rupganj	if in Rupganj, x=1; 0 otherwise
Shahjadpur	Student attends school in shahjadpur	if in Shahjadpur, x=1; 0 otherwise
Tahirpur	Student attends school in tahirpur	if in Tahirpur, x=1; 0 otherwise

Legend (two-tail significance)

- * coefficient significant at 10%
- ** coefficient significant at 5%
- *** coefficient significant at 1%

Source | SS df MS Number of obs = 1174

Appendix 3: Questionnaire and Test Instrument

BRAC EDUCATION PROGRAM

BRIDGE SCHOOL HOUSEHOLD SURVEY INSTRUMENT

ASSESSMENT OF LITERACY AND NUMERACY SKILLS

11/10/2021

1. Type of BRAC School: Bridge ☐ or Non-Bridge ☐

2. Household No.:

খানা নং:

3. Ward No.:

ওয়ার্ড নং:

4. Union:

ইউনিয়ন:

5. Upazila:

Please contact Ms. Papia Ferdousei if you have any questions or concerns. Phone: +880 17 1315 8224 and Email: papia.f@brac.net

For Guardian:

I am conducting a survey on behalf of BRAC Education Programme. BRAC is an NGO whose goal is to improve social and economic condition by improving education status of Bangladeshi children and support the Government of Bangladesh achieving United Nations' Sustainable Development Goal#4 *Quality Education*. We are undertaking a study in partnership with a team of researchers contracted by BRAC. You have been selected for participation in this study.

The questions will take about 25-30 minutes to answer. The answers you give will be shared only with members of our survey team. It is completely your choice if you would like to participate in the survey or not. If I ask any question you don't want to answer, let me know and I will go on to the next question. You can choose to stop the interview at any time. We very much hope you agree to participate. Your views are important.

If you would like more information about the survey, you may contact the BRAC Education Programme at the number and address listed on this card.

6. May we talk to you and your child/ren who go/es to BRAC School?

- ☐ Yes
- ☐ No [proceed to next house]

For Child:

[If child has not heard the consent request for the guardian, then the surveyor should repeat it.]

I would like to ask you some questions about what you have learned in school about reading and arithmetic. Some questions may seem very simple, others quite hard. That is normal.

It is completely your choice if you would like to participate in the survey or not. If I ask any question you don't want to answer, let me know and I will go on to the next question. You can choose to stop the interview at any time. We very much hope you agree to participate.

7. Would you also let us talk (interview) to your child who is attending at BRAC School?

- ☐ Yes
- ☐ No [proceed to next house]

BRIDGE SCHOOL HOUSEHOLD SURVEY INSTRUMENT

8. Respondent number _____

[If interviewing more than one child in a family, identify each child with a new respondent number with link to shared parent e.g., 150a, 150b, 150c. Do not repeat questions directed to parent.]

FOR GUARDIAN

9. Respondent's relationship to child

- ☐ Mother
☐ Father
☐ Other [please specify relationship to child] _____

10. Including the child/children we would like to interview; how many children are in your family/household?

☐ [enter number of children] _____

11. Educational experience: What is the highest class attended by each of the following?

[indicate class level, 0 = no education, 1 = class one, 12 = HSC pass]

	1	2	3	4	5	6	7	8	9	10	11	12	12+
Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* if participant is neither mother nor father

12. Can you read?

- ☐ Yes, I can read and write letters to a friend.
☐ I can only read letters
☐ I can only write letters
☐ No, I cannot read and write

13. If answer to question number 5 is "can read and write letters to a friend," then ask the respondent to read the following sentences:

আমি অত্যন্ত খুশি যে আমার সন্তান স্কুল এ যাচ্ছে। ওকে নিয়ে আমার অনেক বড় স্বপ্ন।
আমার সন্তান একদিন আমাদের সবার মুখ উজ্জ্বল করবে।

[I am extremely happy that my child is going to school. I dream big for him/her. One day s/he will make us proud by his/her success.]

14. Does your spouse read?

- ☐ Like you
☐ Better than you
☐ Poorer than you
☐ No, s/he cannot read and write
☐ I would prefer not to answer

15. How many times did you and your family eat the following foods in the last 24 hours [today and yesterday]?

- | | | | | |
|---------------|-------------------------------|------------------------------|------------------------------|--------------------------------|
| a. Rice | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| b. Daal | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| c. Fish | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| d. Milk | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| e. Egg | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| f. Meat | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| g. Vegetables | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |
| h. Fruits | <input type="checkbox"/> zero | <input type="checkbox"/> one | <input type="checkbox"/> two | <input type="checkbox"/> three |

16. In thinking about money for buying food, is overall family income adequate for your family?

- ☐ Surplus (more than enough)
- ☐ Equal (sufficient/enough)
- ☐ Sometimes deficit (sometimes not enough)
- ☐ Always deficit (never enough)

17. What is your overall family expenditure per month?

- | | |
|---|--|
| <input type="checkbox"/> <5,000 | <input type="checkbox"/> 10,001 – 12,500 |
| <input type="checkbox"/> 5,001 – 7,500 | <input type="checkbox"/> 12,501 – 15,000 |
| <input type="checkbox"/> 7,501 – 10,000 | <input type="checkbox"/> >15,000 |

18. Overall, how much money have you and others in your family earned in the last month, including widows' and other government payments?

- | | |
|---|--|
| <input type="checkbox"/> <5,000 | <input type="checkbox"/> 10,001 – 12,500 |
| <input type="checkbox"/> 5,001 – 7,500 | <input type="checkbox"/> 12,501 – 15,000 |
| <input type="checkbox"/> 7,501 – 10,000 | <input type="checkbox"/> >15,000 |

19. Do you have access to electricity in your home?

- ☐ Yes
- ☐ No

20. Do you or your extended family own land? (Note: If not registered, please check how much they are likely to inherit.

- ☐ Yes
- ☐ No

21. If yes, how much? [decimal/Shotangsho]

22. Homestead land [how much]:

23. Arable land [how much]:

24. Do you have television at home?

- ☐ Yes
- ☐ No

25. Your toilet is-

- ☐ shared with multiple families
- ☐ separate [solely for your family]

26. Gas burner is -

- ☐ Shared
- ☐ separate [solely for your family]

27. Do you have –

- ☐ gas cylinders in addition to wood stove
- ☐ only the wood stove
- ☐ share family/other's wood stove

28. Do you have mobile phone at home?

- ☐ Yes
- ☐ No

29. If yes (Do you use internet on your phone?

- ☐ Yes
- ☐ No

30. If yes (to question #21), which of the following statements apply to your internet usage?
(multipole)

- ☐ I use internet for calling via WhatsApp, IMO, Viber, etc.
- ☐ I use for FaceBook/tiktok/Instagram, etc.
- ☐ I watch videos/YouTube for entertainment purpose
- ☐ I read news on my phone
- ☐ I let my child[ren] use the internet for their study
- ☐ Others

31. If no (to question #21), which of the following statements apply to your phone usage?

- ☐ I use my phone only for calling purpose
- ☐ I use my phone for texting
- ☐ I use my phone to listen to FM radio/radio
- ☐ I listen to music pre-recorded on my phone memory
- ☐ I watch video pre-recorded on my phone memory
- ☐ My childrenren listen to educational recordings
- ☐ My child/ren use/s my phone to join educational/instructional sessions

Family expectation from BRAC School

32. Why do you send your son/daughter to the BRAC school?

- ☐ Education at BRAC School is free
- ☐ Better quality education
- ☐ Teacher is very friendly and caring
- ☐ Project staff take care of the children
- ☐ My child likes BRAC School
- ☐ My child has friends in BRAC School
- ☐ My neighbours send their children to BRAC school

33. How do you make up for his/her absence from household work?

- ☐ My child does not do any household work irrespective of going to school
- ☐ My child does chores before and/or after school
- ☐ My spouse and I do the household work

34. Tell us something about your child's teacher—I know the teacher

- ☐ Very well
- ☐ Somewhat know the teacher
- ☐ Do not know the teacher

35. Which statements apply to your child's teacher?

- ☐ My child likes the teacher
- ☐ My child does not like the teacher
- ☐ Teacher visits my home and takes interest in my child's learning/education
- ☐ Teacher does not much [?] care about my child's education
- ☐ I would rather not comment

36. Does the teacher help you to support your child's schoolwork?

- ☐ Yes
- ☐ No

37. If yes, in what way?

- ☐ Coaches/guides my child in preparing homework
- ☐ Offers before/after school hour mentoring/coaching
- ☐ Visits home and offer extra tutorial support
- ☐ Visits home and inquires about my child's education

38. How often does your child's teacher contact you?

- ☐ Daily
- ☐ Weekly
- ☐ Bi-weekly
- ☐ Monthly
- ☐ Rarely
- ☐ Never

39. After the BRAC school, what do you hope your child will do? (multiple answers)

- ☐ Will go to high school
- ☐ Will stop his/her education after completion of primary schooling
- ☐ Will go for vocational training
- ☐ Will get married (may be linked to female child only) in a few years
- ☐ Will go to high school but get married in a few years
- ☐ Will engage in income generating activities

40. Family engagement in student's homework

- ☐ Father helps in tutoring the child
- ☐ Mother helps in tutoring the child
- ☐ Siblings help
- ☐ Neighbours help
- ☐ Uncle/aunt/cousin/grandparent helps
- ☐ Family hires a tutor
- ☐ BRAC school teacher
- ☐ No help available

41. If you hire a private tutor, how much did you pay as tuition fees per month

- | | | |
|---|-------------------------------|--------------------------------|
| <input type="checkbox"/> 0 (free/no fees) | <input type="checkbox"/> <500 | <input type="checkbox"/> <900 |
| <input type="checkbox"/> <200 | <input type="checkbox"/> <600 | <input type="checkbox"/> <1000 |
| <input type="checkbox"/> <300 | <input type="checkbox"/> <700 | <input type="checkbox"/> >1000 |
| <input type="checkbox"/> <400 | <input type="checkbox"/> <800 | |

42. Does the BRAC school teacher also teach your child privately?

- ☐ Yes
- ☐ No

The Following questions to pose, primarily to selected child. Some questions may be better addressed to the parent.

43. Should we start the interview? Do you agree to participate in the interview?

- ☐ Yes
- ☐ No

44. How old are you? [age in years] _____

45. Sex

- ☐ Boy
- ☐ Girl

46. Are you currently attending [in BRAC] school?

- ☐ Yes
- ☐ No

47. Before attending BRAC school, did you go to another school?

- ☐ Yes
- ☐ No

48. If yes, what was your last grade in the other school that you discontinued (left/dropped out)

- ☐ Grade 1
- ☐ Grade 2
- ☐ Grade 3
- ☐ Grade 4
- ☐ Grade 5
- ☐ Other: please specify _____

49. Why did you leave your previous school?

- ☐ Family migrated to a new place
- ☐ Did not like to go to the school
- ☐ Economic/financial constraints
- ☐ Was not learning anything
- ☐ School was not supportive
- ☐ School closure due to pandemic
- ☐ Do not know why
- ☐ Teacher was not helpful
- ☐ There were no teachers
- ☐ Teachers were not regular in the school
- ☐ Other students bullied me
- ☐ Others, please specify: _____

50. What is the name of the primary school you attended before coming to the BRAC School?

Name: _____

☐ Can't remember

51. Can you please tell me the type of school you did attend?

- ☐ Government school
- ☐ Private school (no fees – run by charitable organization)
- ☐ Private school (with significant fees paid to school and/or teachers)
- ☐ Street school
- ☐ Kindergarten
- ☐ Orphan school
- ☐ Madrassa
- ☐ Non-formal NGO School
- ☐ Other, please specify.....

52. Why are you a BRAC school student?

- ☐ I want to be educated
- ☐ I want to be with friends in BRAC school
- ☐ My parent/guardian insist that I come to BRAC School
- ☐ I like the teacher at BRAC school
- ☐ I like various activities (dancing, singing, sports, etc.) at BRAC school

53. What is the most difficult subject in the curriculum? [assign a rank/number according the difficulty level 1-4; 1 being the most difficult and 4 is the least]

- ☐ Nothing is difficult
- ☐ Bangla
- ☐ Math
- ☐ English
- ☐ Science
- ☐ Social science
- ☐ Other, please specify_____

54. What do you like most about BRAC School? [multiple answers are okay]

- ☐ Learning new things
- ☐ Learning to read
- ☐ Learning to do math
- ☐ I like the teacher
- ☐ I like the games
- ☐ Playing with friends
- ☐ Activities (dancing, singing, sports, etc.)

55. Why do you stay in the BRAC school? [more than one answers are okay]

- ☐ This school is better than my previous school
- ☐ Low tuition fees
- ☐ No tuition fees
- ☐ Within my reach/community
- ☐ I could not get into other schools
- ☐ Textbooks are free
- ☐ School stationeries are free
- ☐ Story books are available
- ☐ BRAC school is fun
- ☐ I don't know
- ☐ I would prefer not to respond to this question

56. Have you ever thought of leaving the [BRAC] school again?

- ☐ Yes
- ☐ No
- ☐ I would prefer not to answer

2. If yes [to 48], why? [multiple responses are okay]

- ☐ I would rather earn money to support my family
- ☐ School is boring
- ☐ Teacher is boring
- ☐ I do not like the teacher
- ☐ I do not like my classmates
- ☐ My classmates bully me
- ☐ I prefer not to answer

57. Do you help other students in the BRAC school? How?

- ☐ Yes—doing homework together
- ☐ Yes—doing classwork together
- ☐ No

58. Do other students in the BRAC school help you? How?

- ☐ Yes—doing homework together
- ☐ Yes—doing classwork together
- ☐ No

59. Does your family wish you could earn money instead of being a BRAC school student?

- ☐ Yes
- ☐ No
- ☐ I do not know

60. After your BRAC school what do you *hope to do* next?

- ☐ Go to high school
- ☐ stop his/her education after completion of primary schooling
- ☐ go for vocational training
- ☐ get a job to support family
- ☐ get married (may be linked to female child only) in a few years
- ☐ go to high school but get married in a few years

61. What do you think you will *have to do* next?

- ☐ go to high school
- ☐ stop education after completion of primary schooling
- ☐ go for vocational training
- ☐ get a job to support family
- ☐ get married (may be linked to female child only) in a few years
- ☐ go to high school but get married in a few years
- ☐ I do not know
- ☐ I prefer not to answer

62. In the card can you identify any five letters? Can you identify any five words?

Students were given reading cards on four levels for reading assessment:

- a. Letters;
- b. Words;
- c. Paragraph (Std I level text); and
- d. Story (Std II level text).]

Students were asked to identify any five letters	
বর্ণ	
ন	প
ম	চ
স	থ
গ	দ
র	ল

Students were asked to identify any five words	
শব্দ	
বাঘ	নোট
নালা	দিন
চুন	কৌটা
রাণী	দেশ
ভোট	বুড়ো

Answered correctly [indicate number of letters/words answered correctly]

- ☐ Letters out of 5

63. Words (students were asked to read any five words)..... out of 5

64. Can you read the following paragraph? [See STD I level text]

Read correctly:

- ☐ Yes: Sentences _____ out of 4.
- ☐ No

64. Can you read the following paragraph? [See STD I level text]

Read correctly:

- ☐ Yes: Sentences _____ out of 4.
☐ No

বাংলা অনুচ্ছেদ

আজ মাঠে মেলা বসেছে। রানা আর মালা মেলায় যাবে। সাথে যাবে মা আর বাবা। ওরা সবাই জিলিপী খাবে।

65. Reading a Story [ask only if child can read paragraph] [STD II level text]

গল্প

তিথি বাড়ির একমাত্র মেয়ে। বাবা মা তাকে খুব ভালোবাসেন। সে মাছ খেতে ভালোবাসে। ওর বাবা বাড়িতে মাছ আনেন। তিথি তখন মায়ের পশে ঘুরঘর করতে থাকে। মাছ তেলে ছাড়া হলে তার মন খুশিতে ভরে যায়। তিথি একসাথে তিন চারটে মাছ ভাজা খেয়ে নেয়। বাবা তিথিকে নিয়ে বাজারে যান। মাঝে মাঝে বাবা বাজার থেকে ইলিশ মাছও আনে। সেদিন তিথির খুশির সীমা থাকে না।

66. Read Correctly:

- ☐ Yes: Sentences _____ out of 10 read correctly
☐ No

Comprehension Questions:

১. তিথিরা কয় ভাই-বোন?
২. তিথির বাবা প্রতিদিন বাজার থেকে কি আনেন?
৩. তিথির পরিবারে আর কে কে আছেন?
৪. তিথির মন কখন খুশিতে ভরে যায়?
৫. তিথি কখন বেশি খুশি হয়?

67. Can you identify the numbers indicated? [interviewer indicates randomly any five numbers in each section.]

সংখ্যা পরিচয় (১ - ৯)	
৩	৭
১	৪
৮	৯
৫	২
যে কোন পাঁচটি সংখ্যা পড়ে শোনাও	

Answered correctly

☐ Indicate number of single digit numbers child correctly identifies...../5

68. Indicate number of two-digit numbers child correctly identifies...../5

সংখ্যা পরিচয় (১০-৯৯)	
৬৫	৩৮
৯২	২৩
৪৭	৭২
৫৬	৮৭
২৯	১১
যে কোন পাঁচটি সংখ্যা পড়ে শোনাও	

69. Subtraction [interviewer randomly chooses two subtractions to complete.]

বিয়োগ	
$\begin{array}{r} ৫১ \\ - ৩৫ \\ \hline \end{array}$	$\begin{array}{r} ৬৭ \\ - ৪৮ \\ \hline \end{array}$
$\begin{array}{r} ৮৪ \\ - ৪৯ \\ \hline \end{array}$	$\begin{array}{r} ৭৩ \\ - ৩৬ \\ \hline \end{array}$
$\begin{array}{r} ৪৬ \\ - ২৭ \\ \hline \end{array}$	$\begin{array}{r} ৩১ \\ - ১৩ \\ \hline \end{array}$
$\begin{array}{r} ৪৫ \\ - ১৮ \\ \hline \end{array}$	$\begin{array}{r} ৪৩ \\ - ২৭ \\ \hline \end{array}$
যে কোন দুইটি	

☐ Number of subtractions correctly answered..... out of 2

70. Divisions [interviewer asks child to complete one division chosen randomly]

ভাগ
৬)৯১৮(
৬)৭৬৯(
৮)৯৮৩(
৪)৫১৩(
যে কোন একটি

Done correctly:

☐ Yes

☐ No

Thank you for participating in our survey. Do you have any question?

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CHILDREN ARE HEADING HOME AT THE END OF THE SCHOOL DAY. However, a group of boys are staying at the school to chat. PHOTO © BRAC