



Programmes to support foundational learning in South Asia

Rachael Fitzpatrick

Education Development Trust

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Question

What lessons can be learnt from programmes aimed at improving foundational learning in South Asia?

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1. Summary

Despite great achievements in improving school enrolment and completion levels in South Asia, a high proportion of learners continue to live in learning poverty, with approximately 50 per cent of learners unable to read or understand a simple text by age ten (UNICEF, 2021). Learning levels were severely impacted by large scale school closures as a result of Covid-19, with approximately 434 million learners impacted in the region (UNICEF, 2021). Improving foundational learning outcomes, particularly for the most marginalised, is a key policy priority for many South Asian countries. This report draws together learning from seven programmes in South Asia aimed at improving foundational learning, to provide insight into effective approaches that have previously or continue to have an impact on foundational learning levels.

The below table outlines the seven programmes reviewed.

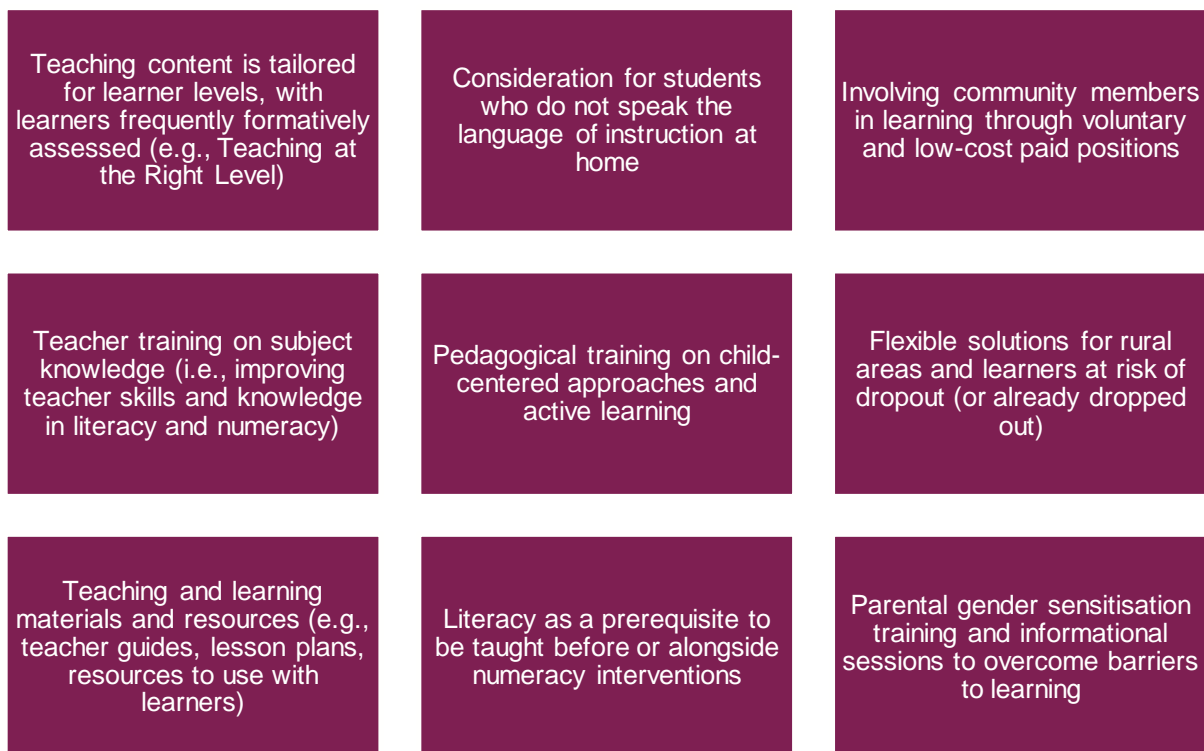
Table 1: outline of programmes reviewed in this report

Country (region)	Programme name	Implementing organisation or donor	Focus area
Pakistan (South Punjab)	Advancing Action for Adolescent Girls 'Siyani Sahelian'	Idara-e-Taleem o Aagahi (ITA)	<ul style="list-style-type: none"> Accelerated learning Life-skills Financial literacy Literacy Numeracy
Afghanistan	Accelerated Learning Centres	UNICEF	<ul style="list-style-type: none"> Accelerated learning Literacy Numeracy
Nepal	Early Grade Reading Program	USAID	<ul style="list-style-type: none"> Early grade reading
Bangladesh	Literacy and Numeracy Boost	Save the Children	<ul style="list-style-type: none"> Literacy Numeracy
India	Teaching at the Right Level	Pratham	<ul style="list-style-type: none"> Literacy Numeracy
Bangladesh	Digital Schools	JAAGO	<ul style="list-style-type: none"> English Bangla Mathematics
Nepal	Leave No Girl Behind	FCDO	<ul style="list-style-type: none"> Literacy Numeracy

Source: Author's own

A review of these seven programmes led to a series of insights on the features of foundational learning programmes in South Asia that may be associated with positive impact. These insights are outlined in the below diagram and summarised in the table below.

Figure 1: insights from seven programmes in South Asian countries aimed at improving foundational learning



Source: Authors own

The below table summarises some key learning from across these programmes on what may be the most impactful approaches to designing foundational learning programmes in South Asia.

Table 2: description of key insights into effective foundational learning programmes in South Asia

Teaching content that is tailored for learner levels with learners frequently formatively assessed	Pratham's approach, Teaching at the Right Level (TaRL), has been shown as an effective learning model in multiple rigorous evaluations and settings across India (J-PAL, 2019). It has also been trialled in other countries globally outside of South Asia (TaRL, 2022). TaRL was developed by Pratham in response to the substantial proportion of children in India who reached Standards III, IV and V without having acquired basic reading and arithmetic skills (Pratham, 2022).
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Consideration for students who do not speak the language of instruction at home

Language of instruction can have a significant impact on attainment levels of learners (Tikly, 2016). A recent World Bank paper indicated there is little data surrounding early-start second language immersion, with a need for more research (World Bank, 2021). In the programmes reviewed for this study, students who do not speak the language of instruction at home performed worse in assessments than speakers of the language of instruction. USAID's Early Grade Reading Programme in Nepal, for example, shows learners who speak Nepali to outperform learners who do not speak Nepali at home in reading assessments (Nepali is the language of instruction).

Involving community members in learning through voluntary and low-cost paid positions

Pratham in particular adopts an approach that works with local communities, either through positions that pay small stipends, or through volunteering. Volunteers running reading camps in school holidays, or during sessions in the school day, was associated with increased outcomes in reading amongst learners (J-PAL, 2019). In the JAAGO Digital Schools model, community members are trained as paid facilitators to support onsite learners whilst they observe instruction from a qualified teacher located elsewhere (UNESCO, 2021).

Subject-specific teacher training

Teacher training in subject-specific content knowledge was another key aspect of programmes. Teacher training in reading (EGRP Nepal) and literacy and numeracy (Literacy and Numeracy Boost, Bangladesh) were key features of the programmes.

Teacher training on child-centred pedagogical approaches and active learning

A key recommendation reported from programmes is to train teachers in adopting child-centred pedagogical approaches. The accelerated learning programme in Afghanistan also found relatively simple approaches, such as teachers rephrasing questions when students do not understand, to have a positive impact on learning outcomes (Kan et al., 2022).

The distance teaching and learning pilot (DTL in Nepal), even though a form of remote learning, encouraged interactive approaches, such as quizzes, word games and puzzles (People in Need, UK Girls' Education Challenge, 2019).

Flexible solutions for rural areas and learners

Many of the programmes targeting disadvantaged groups offered flexible school or accelerating learning options at times convenient to a range of different learners. The JAAGO intervention set up classrooms in rural areas with teachers delivering lessons through remote links, and learners supported in class by facilitators (UNESCO, 2021). Other programmes, such as Leave No Girl Behind in Nepal, adapted to digital methods to keep in touch with girls and assess their

	progress during school closures (People in Need, UK Girls' Education Challenge, 2019)
Teacher learning materials and detailed teacher guides	Detailed teacher guides and in class resources feature in the majority of programmes reviewed (six out of seven). In the Early Grade Reading Programme, Nepal, the provision of learning materials was considered a key factor in programme success (NORC, 2018).
Literacy as a potential prerequisite for understanding in numeracy	The Literacy Boost and Numeracy Boost programme in Bangladesh identified that learners who had been previously involved in Literacy Boost prior to starting Numeracy Boost outperformed learners in numeracy who only engaged in Numeracy Boost (Jonsson et al., 2014). This suggests that a foundational understanding of literacy may be a necessary prerequisite to succeed in and understand numeracy.
Parental engagement and gender sensitisation training	'Siyani Sahelian' (Afghanistan), the Early Grade Reading Program (Nepal), Literacy and Numeracy Boost (Bangladesh) and Distance Teaching Learning (Nepal) all featured elements of parental engagement through resources and information sessions, often adopting an angle of gender sensitisation to help overcome some of the social barriers to girls attending school.

Source: Author's own

2. Overview of programmes and impact

Advancing Action for Adolescent Girls 'Siyani Sahelian'

Description of the programme

The Advancing Action for Adolescent Girls 'Siyani Sahelian' programme is implemented by Idara-e-Taleem o Aagahi (ITA) in South Punjab, Pakistan. The aim of the programme is to support girls in rural areas of Southern Punjab through bridging programmes and technical, vocational and education training and enterprise development programmes with three strands:

- Remedial/accelerated learning/bridging programmes
- Skills/livelihoods and financial literacy
- Life skills-based education

The programme has multiple different strands for different age learners and different school experiences. These strands are outlined below:

Table 3: strands of the 'Siyani Sahelian' programme

Strand	Target group
Chalo Parho Barho (CPB)	<ul style="list-style-type: none"> 45-day course to girls who have either never been enrolled or dropped out in the past two years or less Remedial learning in literacy and numeracy mapped to grade 2 curriculum
Short Term Primary (STP)	<ul style="list-style-type: none"> Girls who dropped out of school in past two years or less in grade 5 of primary school 6 months of accelerated curricular aimed at grade 5
Long Term Primary (LTP)	<ul style="list-style-type: none"> Girls who have dropped out of school in the past two years or less in grades 3 or 4 of primary 12 to 16 months of an accelerated curricular aimed at grades 3 to 5
Short Term Middle (STM)	<ul style="list-style-type: none"> Girls who have dropped out in the past two years or less in grade 8 of middle school 6 months of accelerated curricular aimed at grade 8
Long Term Middle (LTM)	<ul style="list-style-type: none"> Girls who dropped out in past two years or less in grades 6 and 7 of middle school 12 to 16 months of accelerated curricular aimed at grades 6 to 8
Matriculation (MAT)	<ul style="list-style-type: none"> Girls who dropped out in past two years or less in grade 9 12 to 16 months of an accelerated curricular aimed at grade 9 Blended learning with tech component delivered through tablets Partnered with Edkasa to provide live classes for science subjects online at PKR 10,000 per hub/centre

Rawal et al, 2020: 11.

https://www.itacec.org/SiyaniSahelian/document/resources/Third_Party_Evaluation_of_the_Siyani_Sahelian_Programme.pdf

Table: Author's own

The programme offers support for girls to attend lessons, such as free transport to and from hubs. Other features of the programme included:

- Teacher salary and training
- Books, materials and stationery for learners
- Teaching learning materials
- Use of tablets/blended learning approach to allow for flexibility
- Monthly stipend for participating schools to cover any expenses
- Parental information sessions

All participants across the different strands also participate in 60-hour training programme on life skills (Rawal et al, 2020, p. 13). The training covers leadership, communication, health, hygiene, and critical thinking skills (Rawal et al, 2020, p. 13).

Impact measured

The programme has shown signs of significant impact across the different strands. From the CPB strand (45-day course for girls never enrolled or dropped out in past two years), the proportion of girls who were able to read a full sentence in English increased significantly from baseline to endline overall. At the start of the programme, no girls were able to read or understand a sentence in English, with 95% of girls categorised as beginner level (Rawal et al., 2020, p. 37). By the end of the 45-day course, 91% were able to read and understand a sentence in English.

Chart 1: proportion of girls (%) able to read a sentence in English by overall sample, girls dropped out of school and girls never enrolled - CPB

Source: Rawal et al, 2020: 37. This chart has been removed for copyright reasons. The chart can be found at https://www.itacec.org/SiyaniSahelian/document/resources/Third_Party_Evaluation_of_the_Siyani_Sahelian_Programme.pdf

Similarly remarkable results were observed in numeracy. Girls were identified against twelve numeracy levels, with 0 being the lowest and 11 being the highest. At Level 0, girls could not identify a number at all. Level 11, the highest level, signifies girls were able to achieve double digit division. At the start of the intervention, no girls were able to achieve double digit division. By the endline, 47% of girls could.

Chart 2: proportion of girls able to read a sentence in English by overall sample, girls dropped out of school and girls never enrolled - CPB

Source: Rawal et al, 2020: 49. This chart has been removed for copyright reasons. The chart can be found at https://www.itacec.org/SiyaniSahelian/document/resources/Third_Party_Evaluation_of_the_Siyani_Sahelian_Programme.pdf

Similarly impressive gains are noted across all the programmes for different grade levels. For example, for STP, girls scored an average of 2 marks out of 20 in a numeracy test at baseline when attending hubs, and scored 12 out of 20 at endline (Rawal et al., 2020, p. 54). For the Short Term Middle strand (girls who dropped out of school in the past two year from grade 8), girls in hubs scored an average of 3 marks out of 20 in numeracy tests at baseline, increasing to eleven out of twenty by endline (Rawal et al., 2020, p. 57).

The total cost per beneficiary for the life of the programme was estimated at £102 (Rawal et al, 2020, p. 90)

Key takeaways

The success of the programme demonstrates that improvements are possible, even for the most marginalised groups, through short-term remedial learning activities. The authors of the evaluation note the following enabling factors as being important features of the programme that led to success (Rawal et al., 2020, pp. 92–93):

- **Transport facilities** in environments where there were strong cultural norms, and households with financial constraints in locations with high travel costs, households being long distances from schools and unsafe conditions
- **Information sessions held with parents** that helped break down cultural barriers often faced by girls
- **Online delivery** of the Edkasa intervention, that overcame challenges of shortages STEM teachers. Online delivery also mitigated against parental concerns of girls being taught by male teachers.
- **Supply of tablets** for courses involving distance learning

Accelerated Learning Centres, Afghanistan

Description of the programme

UNICEF supports 145 accelerated learning centres across seven provinces in Afghanistan (Kan et al., 2022). The centres target out-of-school adolescent girls, and compact six years of primary schooling into three years. 86% of students in hub schools are girls, helping to narrow gender enrolment gaps (Kan et al., 2022, p. 11). The centres respond to the issue of low learning levels, particularly for girls and children in remote areas.

Impact of the programme

In May 2021, UNICEF commissioned QARA consulting to assess literacy and math skills using Early Grade Reading Assessment and Early Grade Mathematics Assessments. Tests and surveys were administered to UNICEF-supported ALCs, in addition to the closest corresponding government schools, to compare learning levels across the two. The findings highlight that learning levels amongst all learners is low, though children in ALCs perform the same as or better than their peer in government schools (Kan et al., 2022, p. 10). The below table outlines the key impact measures and the explanatory factors associated with higher scores.

Table 4: Comparison in educational outcomes between ALC and school students, with explanatory factors for higher educational outcomes

Source: Kan et al, 2022: 10-11 *This table has been removed for copyright reasons. The table can be viewed at https://www.unicef-irc.org/publications/pdf/Foundational-literacy-and-numeracy-in-rural-Afghanistan_Findings-from-a-baseline-learning-assessment-of-accelerated-learning-centres.pdf*

ALC teachers reportedly received more training in all surveyed areas compared to government (hub) school teachers, which may also explain the higher learning outcomes amongst ALC learners. The below chart outlines the percentage of teachers who reported training by different

topics. One notable difference, for example, is the proportion of teachers in ALC who had received training on learner-centred approaches (87%) compared to government (hub) schools (44%).

Chart 3: percentage of teachers who reported receiving training, by topic and school type (N=58)

Source: Kan et al, 2022: 24. This chart has been removed for copyright reasons. The chart can be viewed at https://www.unicef-irc.org/publications/pdf/Foundational-literacy-and-numeracy-in-rural-Afghanistan_Findings-from-a-baseline-learning-assessment-of-accelerated-learning-centres.pdf

Key takeaways

The study listed the below recommendations (Kan et al., 2022, p. 11):

- Support teachers through training opportunities, with a particular emphasis on **child-centred pedagogy** and specific approaches that were identified as successful, such as rephrasing questions when learners show lack of understanding
- Providing **learning materials** (e.g. reading packs and notebooks) alongside parental engagement to support reading from home
- Need to employ more **female teachers** and to support alternate learning pathways, particularly for marginalised girls
- Increase the **supply of qualified teachers**

An additional recommendation area drawn from the explanatory factors of success (see table above) could include training teachers on how to **deliver feedback to learners**.

Nepal Early Grade Reading Program

Description of the programme

The Early Grade Reading Program was a 6-year USAID program implemented from 2015 to 2020. The goal of the program was to improve the foundational reading skills of Nepali children in grades 1, 2 and 3. The pilot included a ‘minimum package’ and scaled from a few districts to the whole country within five years. The below table outlines the intervention activities that took place between 2016 and 2020 across two cohorts (USAID, 2021).

Table 5: outline of activities in EGRP Nepal

	Intervention activities between baseline 2016 and midterm 2018	Intervention activities between midterm 2018 and endline 2020
Cohort 1	<ul style="list-style-type: none"> • Early grade reading teaching and learning materials • Classroom library books • Teacher training 	<ul style="list-style-type: none"> • Early grade reading teaching and learning materials • Teacher training • In-school teacher support

	<ul style="list-style-type: none"> Community mobilization and grants 	
Cohort 2	<ul style="list-style-type: none"> Classroom library books Limited stakeholder training 	<ul style="list-style-type: none"> Early grade teaching and learning materials Teacher training Limited community mobilization and grants In-school teacher support

Source: USAID, 2021 Early Grade Reading Barometer 2021.

Impact of the programme

Gains were identified for all students, with the greatest gains for students who spoke Nepali at home (with the exception of letter sounds in Grade 1, and Matra identification in Grade 3), opposed to other languages. This suggests a greater need for mother tongue interventions to support the learning of students who may be marginalised at school due to not speaking the national language at home.

The below table outlines the impact of the programme for cohort one learners across three grades, divided by those who speak Nepali at home, and those who speak 'mother tongue' languages.

Table 6: cohort 1 outcomes for all participating students by language spoken at home

	Grade 1		Grade 2		Grade 3	
	Nepali	Mother tongue	Nepali	Mother tongue	Nepali	Mother tongue
Oral reading fluency	+3.7 words per minute	+2.1 words per minute	+ 8.7 words per minute	+2.4 words per minute	+13.7 words per minute	+7.1 words per minute
Letter sounds	+3.0 sounds per minute	+5.8 sounds per minute	+11.6 sounds per minute	+3.5 sounds per minute	+7.5 sounds per minute	+7.0 sounds per minute

Matra identification	+4.0 matras per minute	+3.6 matras per minute	+9.5 matras per minute	+3.7 matras per minute	+9.3 matras per minute	+10.0 matras per minute
Nonwords	+1.9 nonwords per minute	+1.2 nonwords per minute	+3.6 nonwords per minute	+2.0 nonwords per minute	+5.2 nonwords per minute	+4.0 nonwords per minute
Reading comprehension	+0.4 questions (out of 6)	+0.2 questions (out of 6)	+0.9 questions (out of 6)	+0.3 questions (out of 6)	+0.9 questions (out of 6)	+0.7 questions (out of 6)

Source: USAID, 2021, Early Grade Reading Barometer 2021

Key takeaways

The multi-faceted approach of the EGRP suggests that a combination of teacher training, **teaching and learning materials**, resources such as **libraries** and **community sensitisation** may be required for successful reading interventions to take place.

The consistent differences in reading scores between those who speak Nepali at home, and those who speak other languages, suggests a greater need for focus on supporting children whose mother tongue is not the language of instruction.

Literacy and Numeracy Boost Bangladesh

Description of the programme

The Literacy Boost programme was first launched in the Meherpur Sadar sub-district in 2012, and involved recruiting and training 130 community volunteers to implement community-action components for the programme in 18 intervention schools (Jonsson et al., 2014, p. 14). Volunteers were trained to delivery weekly reading camps for grade one to three children, in addition to facilitating monthly parental awareness sessions to promote at home literacy strategies. Numeracy Boost was incorporated the following year in 2013. Teachers were trained on different approaches in teaching mathematics topics, and on the use of games and other pedagogical approaches. The Literacy and Numeracy Boost programmes were also later rolled out in Gangi. The below outlines the activities that were involved in each of the Literacy and Numeracy Boost programmes.

Figure 2: Literacy and Numeracy Boost programme activities

Source: Jonsson et al., 2014, pp. 68–71 This figure has been removed for copyright reasons. The figure can be viewed at

https://resourcecentre.savethechildren.net/pdf/literacy_boost_and_numeracy_boost-_bangladesh-_endline_report_april_2014.pdf/

Impact of the programme

More than half of students who participated in Literacy Boost met the benchmarks set at baseline (reading at least five words correctly in 30 seconds, fluency, accuracy and reading comprehension) (Jonsson et al., 2014, p. 5). However, there are indications that children could read without first knowing and understanding letters. Approximately one-third of students achieved the benchmark in letters (Jonsson et al., 2014, p. 5). In Gangi, students in the intervention schools improved significantly in comparison to learners in control schools in using words, pseudo words, accuracy and reading comprehension, with an over of gains equivalent to three to four months of instruction, and six months of instruction for pseudo words (Jonsson et al., 2014, p. 6).

Chart 4: Percentage of students achieving baseline benchmarks in literacy by sample group

Source: Jonsson et al., 2014, p. 27. This chart has been removed for copyright reasons. The chart can be viewed at https://resourcecentre.savethechildren.net/pdf/literacy_boost_and_numeracy_boost-_bangladesh-_endline_report_april_2014.pdf/

The results were mixed for numeracy in children meeting benchmarks set at baseline. The evaluators report that, despite gains in areas such as number identification, number discrimination and measurement, students still show deficiencies in missing numbers, subtraction, word problems and shapes, amongst other areas (Jonsson et al., 2014, p. 6).

Chart 5: Percentage of students achieving baseline benchmarks in numeracy by sample group

Source: Jonsson et al., 2014, p. 32. This chart has been removed for copyright reasons. The chart can be viewed at https://resourcecentre.savethechildren.net/pdf/literacy_boost_and_numeracy_boost-_bangladesh-_endline_report_april_2014.pdf/

The evaluators identified that the students who had previously participated in Literacy Boost prior to Numeracy Boost performed significantly better than students who only participated in Numeracy Boost. This suggests that improving literacy skills is an important prerequisite for educational improvements in mathematics.

Key takeaways

The recommendations from this study focussed on subject-specific areas where the least gains were made for students. Understanding student performance on this granular level may help programmes make more efficient improvements through formative assessments of learners. Further, the reporting that students who participated in both Literacy and Numeracy Boost performed better in numeracy than students who only participated in Numeracy Boost, suggests good foundational learning in **literacy may be a prerequisite for learning aspects of numeracy**. This, however, requires more investigation.

Some of the strongest drivers of inequality in reading skills amongst participating students was **diversity of household reading materials** and intensity of **students' chore responsibilities**, particularly amongst girls. Subgroups of students made no progress, which lowered overall average gains. The evaluation suggested **additional remedial action** was needed for learners who were not demonstrating progress in line with their peers. The evaluators also commented on the need for gender-based community sensitisation around the importance of learning.

Pratham's Teaching at the Right Level (TaRL)

Description of the programme

Unlike the other programmes reviewed in this report, TaRL is an approach that can be adopted within programmes, in addition to being the sole feature. Rather than being a standalone programme, it is a widely used approach that Pratham have adopted in a multitude of programmes across different states in India.

Pratham developed a solution to the foundational learning deficit identified in India over fifteen years ago (Pratham, 2022). The purpose of the programme is to help learners who have fallen below expected levels, or never met expected levels, in reading and arithmetic. The below table outlines how TaRL differs from traditional approaches used in Indian schools.

Table 7: Pratham's approach to changing school systems to ensure learning for all

Source: Pratham, 2022. This table has been removed for copyright reasons. The table can be viewed at <https://www.pratham.org/about/teaching-at-the-right-level/>

The below outlines some of the key programmes through which Pratham have implemented TaRL. This list is not exhaustive, as it was not possible to cover the full extent of Pratham's work in this review.

Teachers implementing TaRL for periods throughout the day

Two delivery models trialled by Pratham include teachers organising their classrooms by learning level for a dedicated hour during the day (J-PAL, 2019). Teachers received training on how to do so, in addition to receiving ongoing support from trained government staff. A second model involved working with trained volunteers in schools, where learning camps were held in short bursts during the school day for between 40 and 60 days.

Balsakhi programme

The Balsakhi programme recruited individuals from the local community to work with third and fourth grade students who had fallen behind expected levels. The instructors would typically meet with 15-20 students from a class for two hours a day to support the development of core competencies in basic numeracy and literacy (Banerjee et al., 2007). The volunteers use standardised curriculum developed by Pratham. Instructors received two weeks training at the start of the school year, with continued support from Pratham throughout the year. Each instructor is paid a stipend of approximately USD10-15 per month.

Computer Assisted Learning

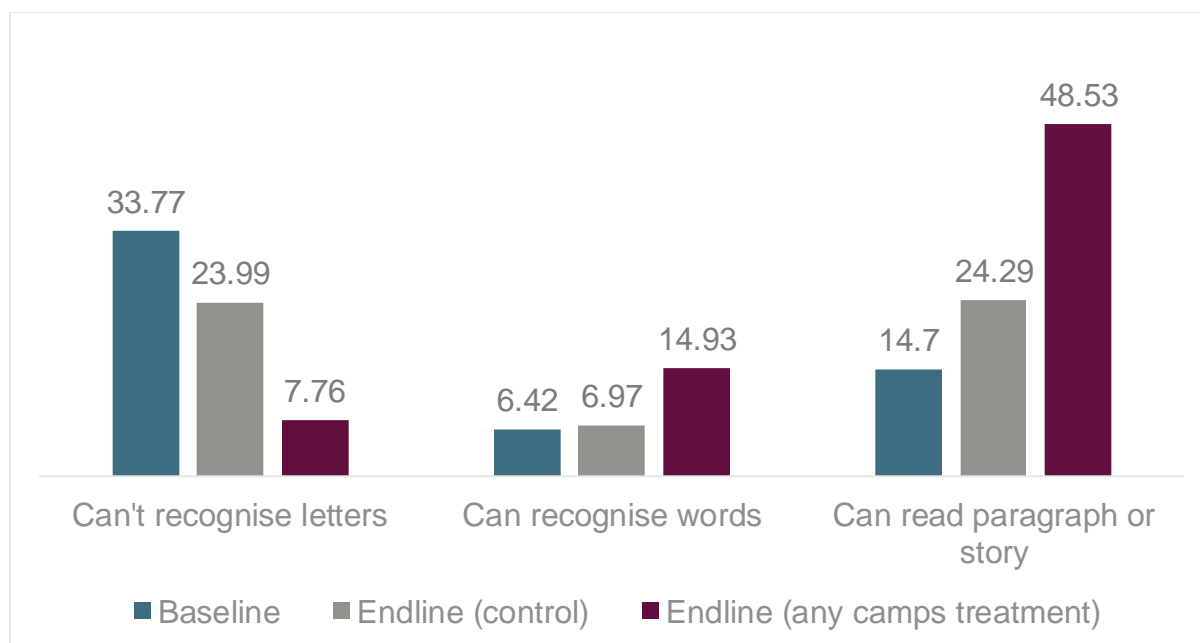
Another programme from Pratham again involved hiring instructors from the local community, and providing them with five days computer training to facilitate a computer-assisted learning course (Banerjee et al., 2007). Children had two hours of shared computer time per week – one during class time and another after school. During computer sessions, children played educational computer games with an emphasis on basic competencies from the mathematics curriculum. In the second year of the programme, Pratham partnered with Media-Pro, a local software company, to develop software that could follow the official curriculum more closely. This programme reportedly cost USD15 per student per year (Banerjee et al., 2007).

Impact of the programme

J-PAL have conducted multiple rigorous evaluations into the TaRL approach over a number of years. Six randomised evaluations conducted in seven states in India found that TaRL raised test scores between 0.07 and 0.7 standard deviations (J-PAL, 2019). The evaluations found that the lowest-performing students made the greatest gains across the evaluations, suggesting TaRL is effective at reducing learning gaps.

When trained volunteers were used in schools for periods of 40 to 60 days, the number of children who were able to read a story or paragraph in Hindi doubled (J-PAL, 2019). The below chart outlines the results in student reading competency in Hindi in Uttar Pradesh, comparing the baseline results with control groups and those attending Pratham learning camps.

Chart 6: student competency in Hindi, baseline and endline in Uttar Pradesh



Source: A. Banerjee et al., 2016, p. 32. Reproduced with permission from the source.

In the computer-assisted learning programme, maths scores increased by 0.47 standard deviations, with results remaining significant one year after the intervention (Banerjee et al., 2007).

Interestingly, the evaluations also highlighted some challenges in implementation. For the Balsakhi programme, a high turnover of facilitators caused issues for sustainability, potentially due to the low stipend (Banerjee et al., 2007). In Bihar and Uttarakhand teachers were found to not adopt the TaRL approach, despite receiving training and ongoing support from Pratham. It was found that teachers were not grouping learners by ability level at set periods during the day, and they were not using the assigned teaching materials (Banerjee et al., 2007). When Pratham implemented the programme in Haryana and Uttar Pradesh, they included 'learning camps' that took place during school hours, additional 10-day summer camps, and increased monitoring support for teachers (Banerjee et al., 2007).

Key takeaways

The consistency in learning improvements across all Pratham TaRL interventions via rigorous evaluation suggests that this approach is effective for improving foundational learning, particularly for the most disadvantaged students. The use of **volunteers and low-cost instructors from local communities** is a key feature of the Pratham approach, in addition to using child-centred learning approaches alongside effective use of **formative assessment** to accurately understand learner levels.

Digital schools in Bangladesh

Description of the programme

Digital schools in Bangladesh are operated by JAAGO (UNESCO, 2021). The Digital Schools connect qualified and trained central teachers to remote primary school classrooms through simple video conferencing software, bringing quality instruction in English, Bangla and Mathematics. The resources required to implement digital schools are:

- Infrastructure and software: multimedia classroom application with webcam and speakers, internet access, electricity (inc. alternate sources in the event of outages)
- Trained centre teachers and local facilitators
- Adapted curriculum content

The ICT-based digital school system uses Webex software, a multi-party interactive professional video conferencing software. The program contains an interactive whiteboard, facilities for desktop, document, slide-sharing, video-sharing and a sketch board making it sufficiently versatile for an education setting. Online teachers based in Dhaka deliver the lecture and an interactive session with students through this technology. The teachers are supported onsite in the remote classroom by two facilitators who assist the children with classwork and maintain a disciplined and productive classroom environment.

The teachers follow the national curriculum and teach English, Bengali and Mathematics from reception to grade 2. In grades 3 and 4 science and social studies are added. Lessons last 45 minutes.

Impact of the programme

The evaluation by Salam and Ahmed (2015, cited in UNESCO, 2021) found that students from JAAGO Foundation Digital Schools performed comparably to students from control schools in the key subjects of English and Mathematics, while the performance of students in Bangla was higher in control schools. However, children in JAAGO schools were particularly disadvantaged, with the majority of parents only receiving primary education (1.8% of parents in control schools were only educated to primary level or less, compared to 87% of parents in intervention schools, with parental education marked as an indicator of deprivation). This suggests that the programme is effective in raising learning levels of children in remote parts of Bangladesh that would otherwise not have access to education.

Key takeaways

There are multiple potential **benefits to providing remote schooling where lessons are delivered by qualified teachers** to children who would otherwise not attend school. Firstly, it takes away recruitment challenges of appointing qualified teachers to remote locations. Secondly, it provides a role for members of the local community to support learning, even if not qualified as teachers. Children in remote schools performing on par with their peers in schools with teachers present suggests that they are a potentially effective approach in delivering learning.

Marginalised No More – distance teaching and learning Nepal

Description of the programme

The Aarambha project is working with married out of school (M-OOS) adolescent girls of Rautahat and Bara districts with literacy, numeracy and life skills courses (Street Child, 2020). As a result of Covid-19, a distance teaching learning model was implemented through the use of mobile phone.

Each girl received calls three times in a week; each call was on an average ten minutes focusing on specific learning objective of that day in-line with pre-decided session and lesson plan.

- First calls: facilitators would share information about COVID 19 and project's community feedback and response mechanism (CFRM) system including available services in local level.
- Following calls: facilitators would revise content based on what girls learnt and adapt the next sessions/sub-sessions accordingly. Based on the home assignments, engagement of the girls during the telephone calls and facilitators' notes, assessments about the progress of girls' learning was carried out on weekly basis.

During the implementation, facilitators also encouraged the parents and family members to support their children's education, safety and wellbeing at home, and how to care of their own wellbeing. In each call, facilitators mandatorily obtained consent from both family and the girls.

Lesson content differentiated learning content to learner levels, with home-based lessons including quizzes, word-games and puzzles. Other lesson content drew on story and drama-based content and illustrative books.

Community educators delivering distance teaching and learning received refresher training in content, pedagogy and lesson planning relevant to the “teaching at the right level” approach (Street Child, 2020). For literacy, learning targets were set for girls to improve at word, paragraph and story level and appropriate targets were also set for numeracy and Life Skills. Formative assessment revealed marked improvement in learning outcomes for literacy, numeracy and also Life Skills themes including Sexual and Reproductive Health Rights.

Impact of the programme

The basis for learning assessment (poor, fair or good learning achievement) was girls' conduct of home assignments, level of engagement on question and answer during the sessions and facilitators' daily notes. The programme was also reported to have positive social emotional outcomes as it gave girls something to focus on during the pandemic. The below chart displays the baseline and endline learning levels, showing gains across all areas. At baseline, 22% of learners were at the 'one-digit-number' recognition level, with this proportion reducing to 5% at endline. At the start of the intervention, just under a quarter of learners were proficient at the 'three-digit-number recognition' level, which doubled by endline.

Chart 7: Learning Levels of learners at endline and baseline

Source: Street Child, 2020, p. 7. This chart has been removed for copyright reasons. The chart can be viewed at <https://street-child.org/report/>

Key takeaways

The flexibility to move to **distance learning**, and the benefits to participating girls, highlights the potential of distance learning approaches to reach marginalised girls and ensure they are able to participate in education. **Tailoring learning content** to learner knowledge and understanding, opposed to using a set curriculum, ensured girls were able to engage with learning content effectively, and build foundational knowledge without being required to move on at a pace that was too fast for them.

3. Conclusion

This report has outlined key insights from seven foundational learning programmes in South Asia, outlining the impact of each programme, and some key takeaways for consideration for programme design in the region. Below summarises the key insights from the seven programmes reviewed.

1. Teaching content is tailored for learner levels
2. Consideration for learners who do not speak the language of instruction at home
3. Involving community members in learning through facilitation roles
4. Teacher training on subject-knowledge
5. Pedagogical training on child-centred approaches and active learning
6. Flexible solutions for rural areas and learners at risk of dropout (e.g., remote learning through digital schools or provision of tablets)
7. Teaching and learning materials and resources (e.g., notebooks, teacher guides etc.)
8. Literacy as a prerequisite to be taught before or alongside numeracy interventions
9. Parental gender sensitisation training and informational sessions to help overcome social barriers

4. References

- Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukerji, S., Shotland, M., & Walton, M. (2016). *Mainstreaming an Effective Intervention: Evidence from Randomized Evaluations of “Teaching at the Right Level” in India*. 39. <https://www.nber.org/papers/w22746>
- Banerjee, A. V., Cole, S., Duflo, E., & Linden, L. (2007). *. *The Quarterly Journal of Economics*, 122(3), 1235–1264. <https://doi.org/10.1162/qjec.122.3.1235>
- Jonsson, C., Guajardo, J., Dab Nath, B., & Hossain, M. (2014). *Literacy & Numeracy Boost Bangladesh Endline April 2014*. https://resourcecentre.savethechildren.net/pdf/literacy_boost_and_numeracy_boost-bangladesh-_endline_report_april_2014.pdf/
- J-PAL. (2019). *Tailoring instruction to students’ learning levels to increase learning*. The Abdul Latif Jameel Poverty Action Lab (J-PAL). <https://www.povertyactionlab.org/policy-insight/tailoring-instruction-students-learning-levels-increase-learning>
- Kan, S., Fahez, M., & Valenza, M. (2022). *Foundational literacy and numeracy in rural Afghanistan: Findings from a baseline learning assessment of accelerated learning centres*. UNICEF. <https://www.unicef-irc.org/publications/1347-foundational-literacy-and-numeracy-in-rural-afghanistan-findings-from-a-baseline-learning-assessment-of-accelerated-learning.html>
- NORC. (2018). *USAID Early Grade Reading Program in Nepal—Impact evaluation midline results*. NORC at the University of Chicago for USAID. <https://shared.rti.org/content/usaaid-early-grade-reading-program-nepal-impact-evaluation-midline-results-2018>
- People in Need, UK Girls’ Education Challenge. (2019). *Aarambha*. People in Need, UK Girls’ Education Challenge. <https://inee.org/resources/aarambha>
- Pratham. (2022). *Teaching at the Right Level – Pratham*. <https://www.pratham.org/about/teaching-at-the-right-level/>
- Rawal, S., Aslam, M., Sabates, R., & Cashman, L. (2020). *Evaluation of the Siyani Sahelian (SS) Programme in South Punjab*. Oxford Partnership for Education Research and Analysis. <https://itacec.org/SiyaniSahelian>
- Street Child. (2020). *Marginalised no more: Distance teaching and learning impact assessment*. Street Child: Marginalised No More.
- TaRL. (2022). *Teaching at the Right Level—Strengthening foundational skills*. Teaching at the Right Level. <https://www.teachingattherightlevel.org/>
- Tikly, L. (2016). Language-in-education policy in low-income, postcolonial contexts: Towards a social justice approach. *Comparative Education*, 52(3), 408–425. <https://doi.org/10.1080/03050068.2016.1185272>

UNESCO. (2021). *Digital schools, Jaago Foundation: A simple online teaching solution for quality education in rural Bangladesh—UNESCO Digital Library*. UNESCO.
<https://unesdoc.unesco.org/ark:/48223/pf0000380187>

UNICEF. (2021). *Education in South Asia*. <https://www.unicef.org/rosa/what-we-do/education>

USAID. (2021). *2020 Nepal Early Grade Reading Program Endline Study—Early Grade Reading Barometer*. <https://earlygradereadingbarometer.org/results/Nepal/EGRP-2020>

World Bank. (2021). *Loud and clear: Effective language of instruction policies for learning*. The World Bank.
<https://documents1.worldbank.org/curated/en/517851626203470278/pdf/Loud-and-Clear-Effective-Language-of-Instruction-Policies-For-Learning.pdf>

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