



#### Primary must not be Secondary.

# Increasing the numerical, language and learning skills of students in public primary schools

SAATHI IMPACT REPORT
Melamchi Municipality
2021-2023





# **Listening to Our Executive Director**

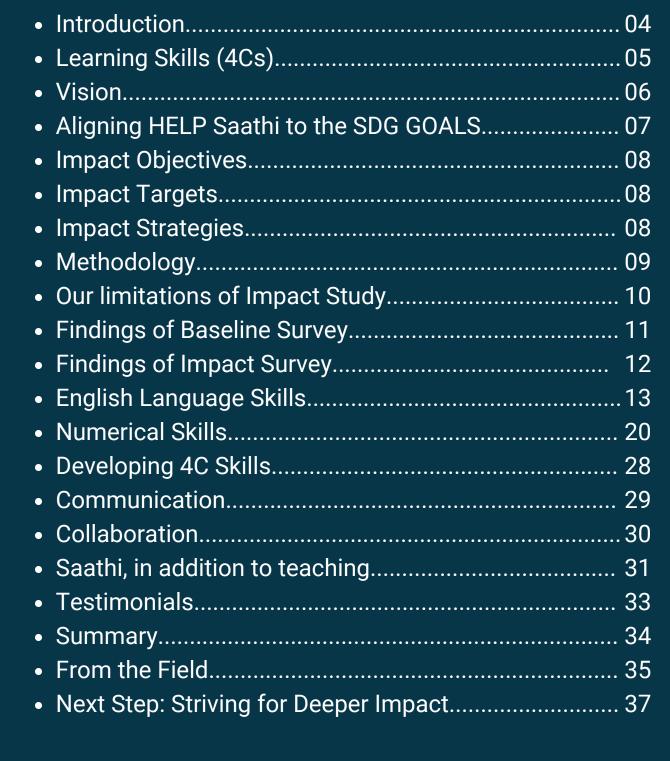


### Measuring the Saathi Teachers Intervention and impact.

We have ended two years of placement of Saathi teachers across five schools in Melamchi Municipality. And this report will share the outcome of the combined efforts of Saathi teachers against the baseline survey within the individual schools and as a whole in Melamchi Municipality.

Less than 1% of students could read a paragraph, but now almost 37% could write a full paragraph and understand it. Similarly, less than 2% of students could perform multiplication problems, and now using the same question, 61% can solve it. Saathis don't just teach but also engage their students in extracurricular activities inside and outside of the classrooms and place high importance on students' ability to communicate, collaborate and ask for leadership roles. When asked how often the students get to plan and engage in an activity under their initiation, 80% of students from Saathi Schools said they had the opportunity to do so. For a similar question, 92% of students from the control schools said they had no opportunity to participate in any activities. This is a clear indication that Saathi teachers are making an impact not only on the academic progress of the students but also on their non-academic development.

# Index







# Primary must

# HELP A FRIEND OF LEARNERS

#### Introduction

#### Bridging the gap between public and private school students.

Saathi Teachers Programme is two years of paired and paid teaching placement for qualified and passionate young people to teach at basic-level schools where the learning achievements are extremely low. Saathi Teachers Programme currently works in partnership with three local governments namely (Paanchpokhari, Melamchi, and Tripurasundari Rural Municipalities) supporting 15 schools benefitting more than 2000 children.

This programme started from our fundamental belief that to change the quality of public schools, there must be a coordinated effort to change the way teaching is delivered at the foundation level in terms of ensuring the availability of quality teachers and an enabling environment in which children can learn with utmost care and support. For this to occur, Saathi teachers work closely with the local school management committee and the local teachers as a combination of forces to transform the classrooms.

These young teachers, called Saathis, are recruited through a rigorous application process. Once selected, they go through an intensive 21-day Saathi School (residential, pre-service training) to equip them with key knowledge and skills in delivering their classes in the most effective manner. At this training, the Saathis go through basic understanding, knowledge, methods, teaching practice and self-exploratory tools and resources to apply to support the learning process of the children they will teach.

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#### **Learning Skills**

For a strong foundation, a child needs to develop literacy and numeracy skills and 21st-century learning skills (4Cs). Research have proven that literacy and numeracy help learners gain fundamental skills necessary to achieve success.

Literacy skills allow children to explore how language works and use this knowledge in various situations. Literacy skills include writing, reading, communicating, listening, and understanding. Children need to be given opportunities to use and extend their language to develop their literacy skills to a higher level.

The key aspect of numeracy skills is for children to understand their real-life applications. Children need to have numeracy skills because they are equally important to literacy skills for social proficiency. Numeracy includes numbers, shape, time, problem-solving and handling data, all of which are needed in everyday life.



# Communication Collaboration Critical Thinking Creativity

Among the popular 21st
Century skills, 4C's are called
learning skills.
Critical thinking helps
students question, claim, and
seek the truth.
Creativity aids the students
in thinking uniquely.

Collaboration helps students understand how to address a problem, pitch solutions and create the best solutions.

Communication teaches students to convey ideas quickly and efficiently.

Combined, the four C's empower students to become one-person think tanks.

05



#### **VISION**

Each child through their education gets connected to their community and the world.

# Aligning HELP Saathi to the SDG GOALS











Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

Target 4.4 By 2030, substantially increase youth and adults with relevant skills, including technical and vocational skills, employment, decent jobs, and entrepreneurship.

#### **IMPACT OBJECTIVES**

- Build a strong education foundation for Grade 1-5 children and prepare them for further study.
- Support local governments in developing sustainable models to improve primary education in a local context.
- Attract local young graduates to educational leadership in keeping with the urgency of this intervention.

#### **OUTCOME TARGETS**

- The students' learning achievement will increase by at least 20% of the baseline.
- Curricular and co-curricular activities will enhance the 21st Century skills (Critical Thinking, Collaboration, Communication and Creativity).
- The school will be supported to plan for improvement through our self-evaluation framework methodology.
- The Saathi teachers will continue to work in the education sector even after two years to enhance the quality of education in their community.

#### **Impact Strategy**

#### **ACTIVITIES**

- Recruit passionate teachers willing to work in rural settings for two years.
- Run a residential training session for the Saathi Teachers for 3-4 weeks on child psychology, pedagogy and modern tools for teaching and learning.
- Partner with interested local governments with less number of teachers in the primary region
- Select high-need schools and deploy Saathi Teachers in a pair for two years
- Regularly observe classrooms and provide feedback to teachers
- Run training and leadership development workshops for teachers throughout their placement
- Conduct baseline and impact surveys to assess the impact

#### Methodology

This impact evaluation used a before-after approach to measure students' learning achievements in literacy and numerical skills. Also, a control school approach was selected to assess the comparative impact of schools in the same region that does not have Saathi Teachers. The study was conducted in 5 Saathi schools and two control schools in Melamchi Municipality, involving more than 550 students. The municipality recommended the control school, one of which is a top-performing primary school in this region.

#### Step 1: Metric definition and design

To begin with, we established criteria for measuring the numerical and linguistic abilities of the students. We developed a standardized questionnaire that concentrated on fundamental abilities emphasizing basic skills. The questionnaire included inquiries on counting, place value, and basic arithmetic operations to evaluate numerical proficiency. We hypothesized that if students could tackle addition problems, they would be capable of solving subtraction problems. Similarly, we presented multiplication questions, reasoning that if students could solve them, they would easily solve division problems. In addition, we employed a standard survey to assess the areas of students' 4C (critical thinking, communication, collaboration, and creativity) skills, with the same set of questions used across Grades 2-5.

#### **Step 2: Conduct Surveys**

We then ran surveys across five placement schools of the Saathi Teachers Programme and two control schools of Melamchi Municipality. The survey was conducted on students in Grades 2 to Grade 5. The control school was identical to Saathi Placement Schools as it was also a primary school (Grades 1-5) with a similar number of students. The local diversity was also similar to the placement schools.

#### **Step 3: Record and Analysis**

The answer sheets were examined on a 3-point scale: good, average, and poor. If the student had more than 75% correct answers, it was rated as good. Around 50-75% accurate was rated as average and less than 50% as poor. Survey results and the frequency of occurrence for each question were recorded as they were.

# itations

Though we tried to the effect of factors that threatened the reliability and fairness of our study, there were some limitations to this survey:

#### ANSWERS

We encouraged students to write for themselves. But, some of the students might have managed to copy from their friends. In Saathi placement schools, the local teachers were assigned for the subjects Saathi's are not teaching. In some cases, the teachers might also have helped students.

#### SURVEY QUESTIONS FOR 5-9 YEARS OLD

Despite our efforts to create simple questions, some students may have encountered them for the first time and could not answer them due to their lack of familiarity with such surveys and worksheets.

#### UNEQUAL SAMPLE SPACES

There were around 400 students from the Saathi schools, while only around 150 students were assessed as a control group from schools where Saathi teachers were not placed.

#### **Findings of Baseline Survey**



Students in classes 1 through 5 were unable to write the alphabet.



In class 3, students were unable to write words such as "door," "house," "mango," and so on.



Students from class 4 could write a proper sentence from a given jumbled word.



Students of class 5 could not solve single-digit multiplication.



Students of class 3 could not solve two-digit addition.



Students in class 4 were unable to comprehend place value.

#### BASELINE SURVEY

Given the context that Saathi Teachers Program will be working in a school for two years, we needed some baseline to measure their impact during their placement. Saathi teachers teach Maths and English. So, we took the Maths and English diagnostic test on November 2021 in Five Saathi and two control schools.

We used the diagnostics test for Math and English and the 4C skills.

The survey result shows that most students were behind the grade level in all the subjects – English and Maths, defined by the National Curriculum of Nepal. An intervention is needed in the primary class because this is the foundation of a good education for a child.

#### **Findings of Impact Survey**



Students in classes 1 through 5 are now able to write the alphabet (25% increment compared to Baseline survey)



In class 3, students are able to write words like door, house, mango, etc. (55% increment)



Students from class 4 now can write a proper sentence from a given jumbled word. (51% increment)



Students of class 5 now can solve single-digit multiplication.(31% increment)



Students of class 3 can solve two-digit addition. (89% increment, hence the best performance of all the categories and grades)



Students in class 4 are able to comprehend place value. (36% increment)

#### Saathi Impact

After completing the two-year of Saathi Teachers placement, we assessed the impact in February 2023 on the same schools as in the baseline study. We took diagnostic tests for Math, English, and 4C skills in five Saathi schools and two control schools, using the same tests as before.

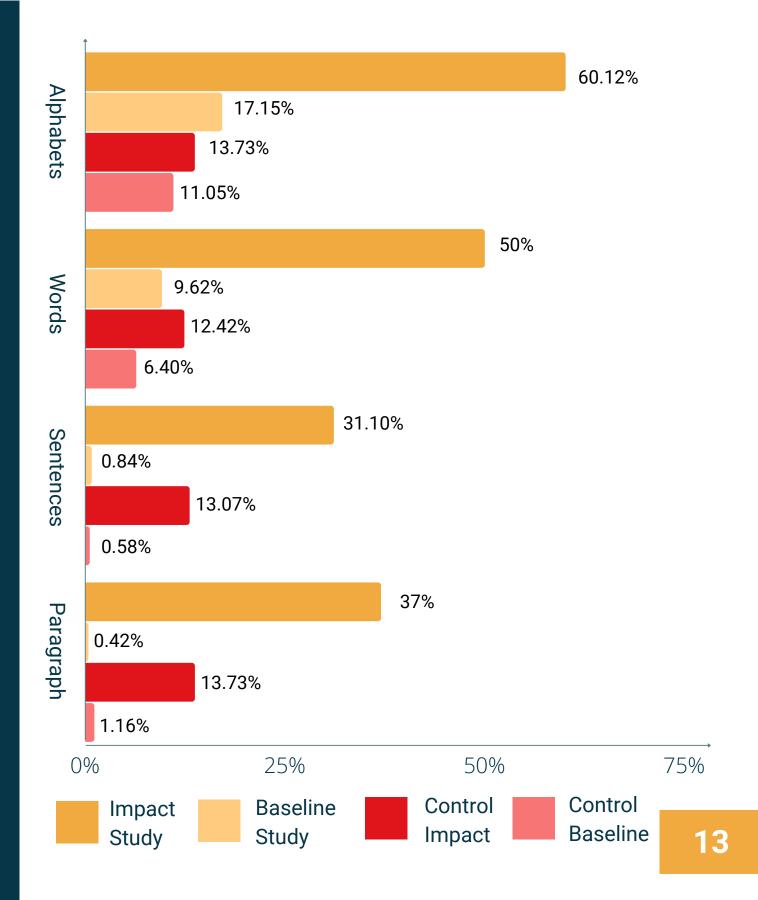
The survey results indicate that most students are now at the grade level for English and Math in all subjects, as defined by the National Curriculum of Nepal. Saathi teachers help students achieve academic success and positively impact their personal development.

#### LANGUAGE SKILL: ENGLISH

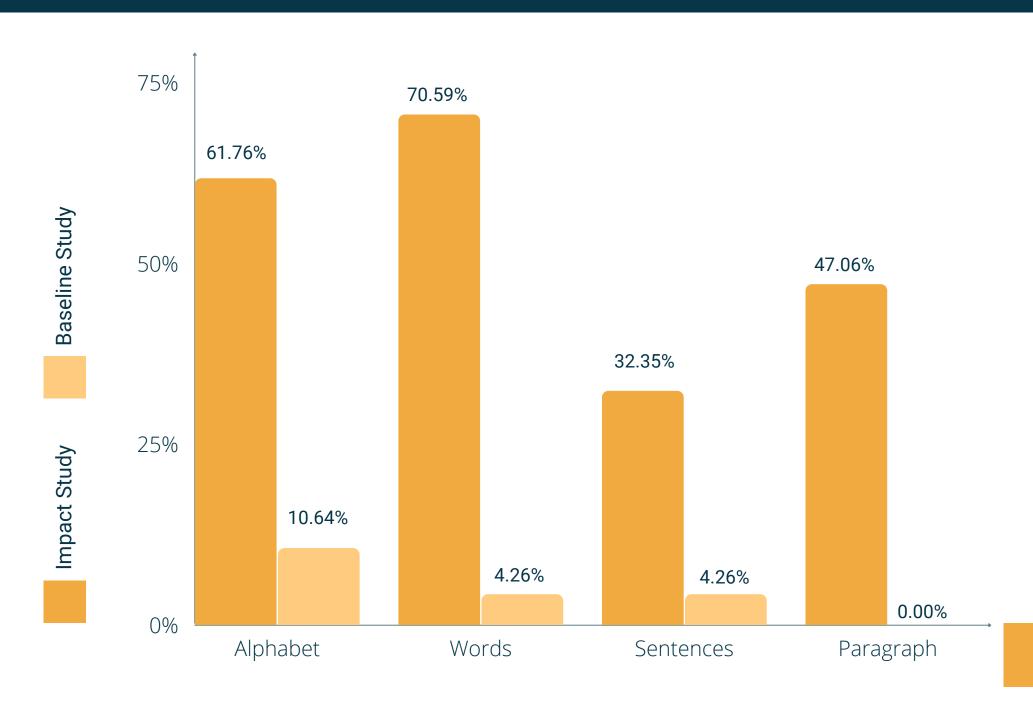
Our 4 Saathi teachers directly support the students in the English language. We have seen significant growth in students learning competencies in terms of the English language.

While only 9.62% of students could write a proper word during the baseline survey, now about 50% can easily write the words using pictures and jumbled words.

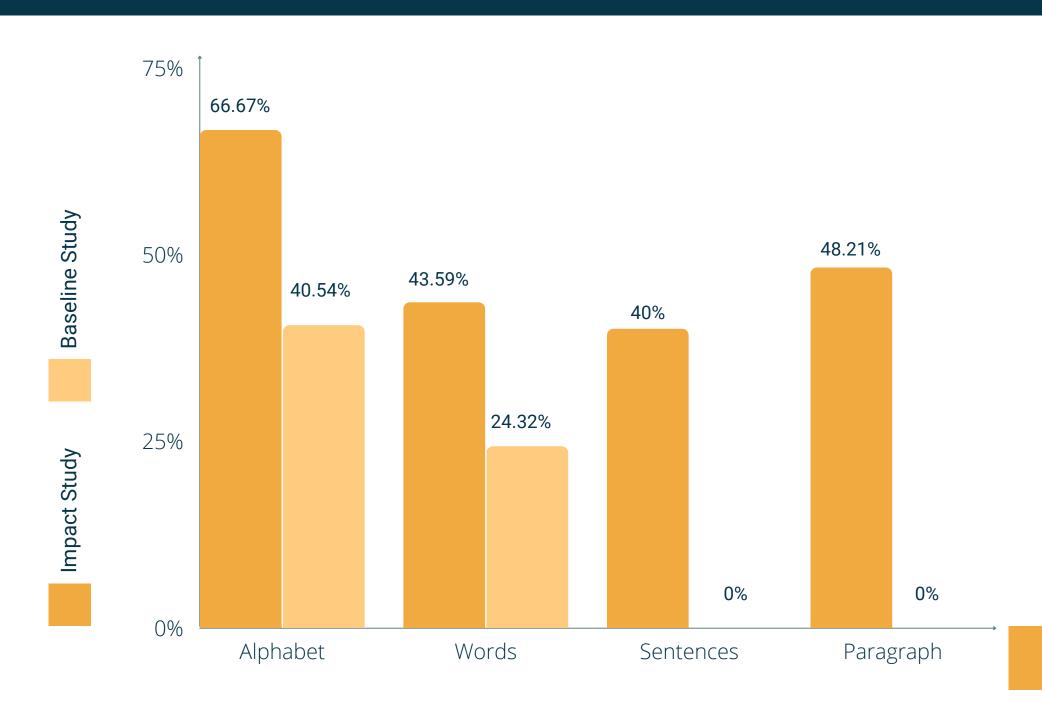
Compared to the control school, which happens to be one of the well-performing primary schools in the region, our Saathi schools perform well. The growth rate of Saathi Placed schools is around 30-40%, whereas the growth rate of the control schools appears to be only 10-12%.



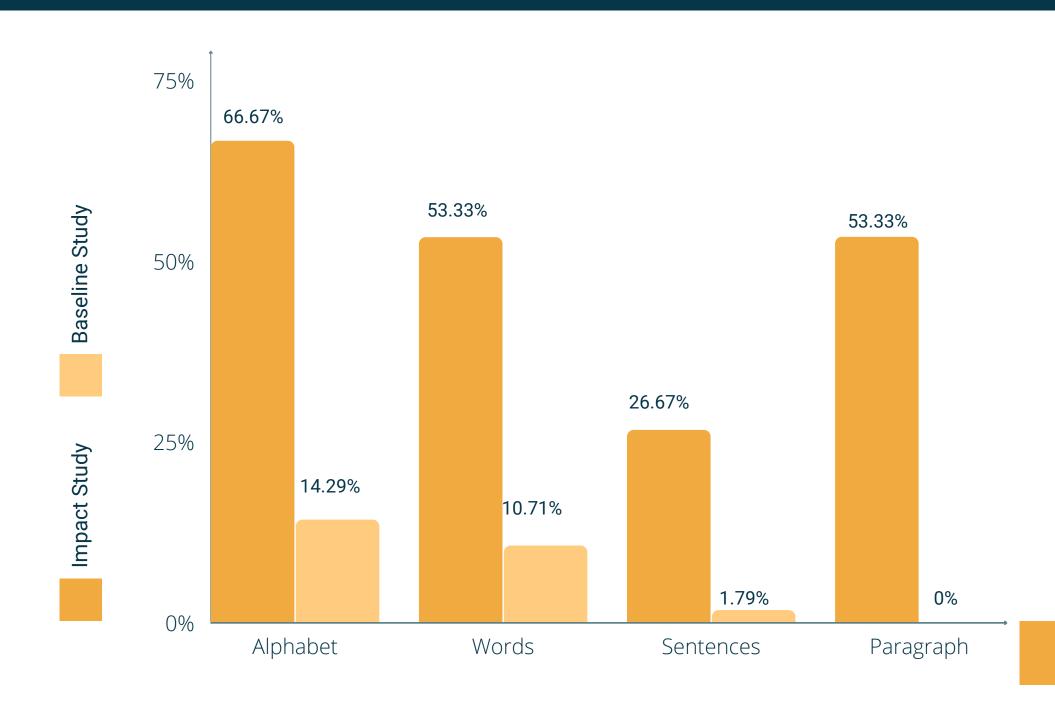
#### **English Language: Shree Saraswati Basic School**



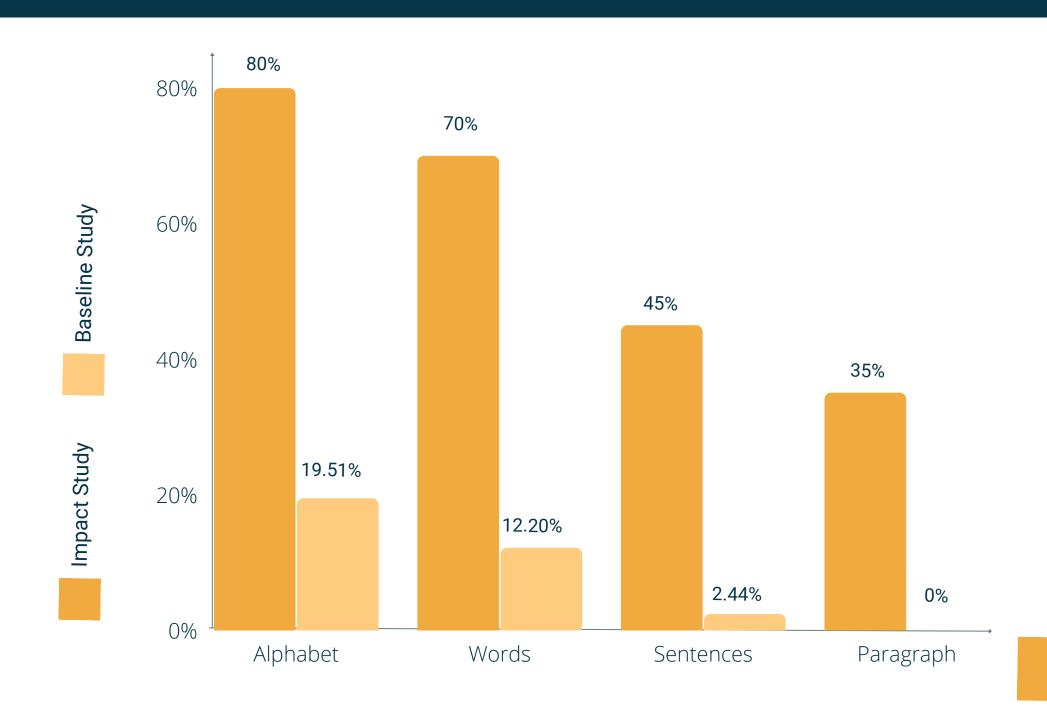
#### **English Language: Shree Daduwa Basic School**



#### **English Language: Shree Pragya Basic School**

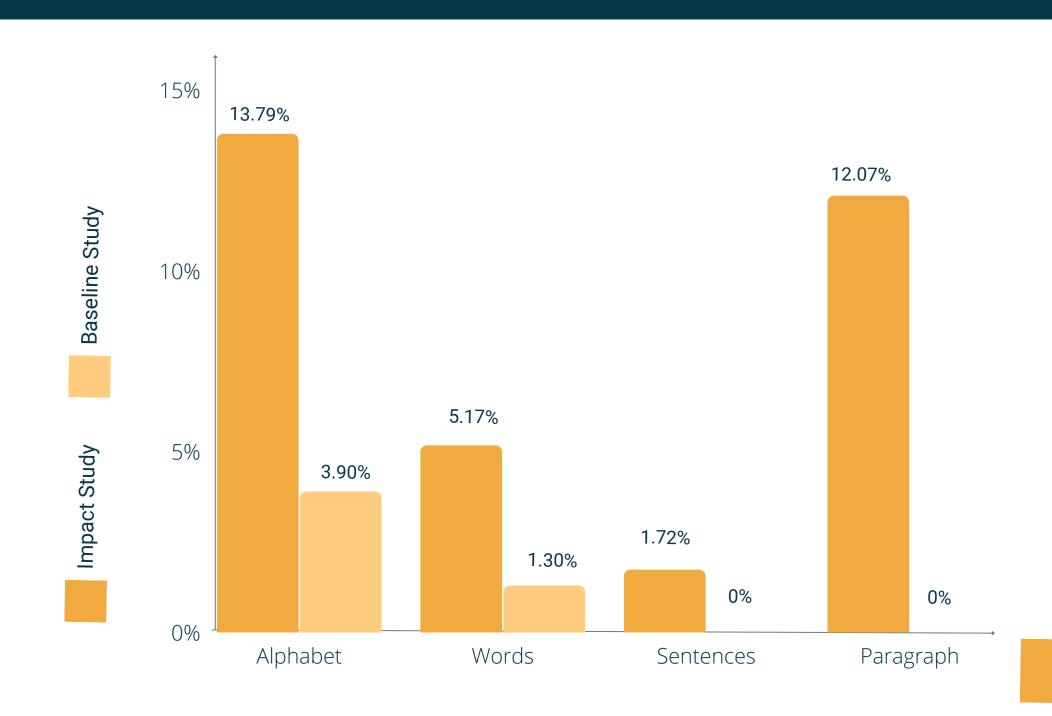


#### **English Language: Shree Hiradevi Basic School**



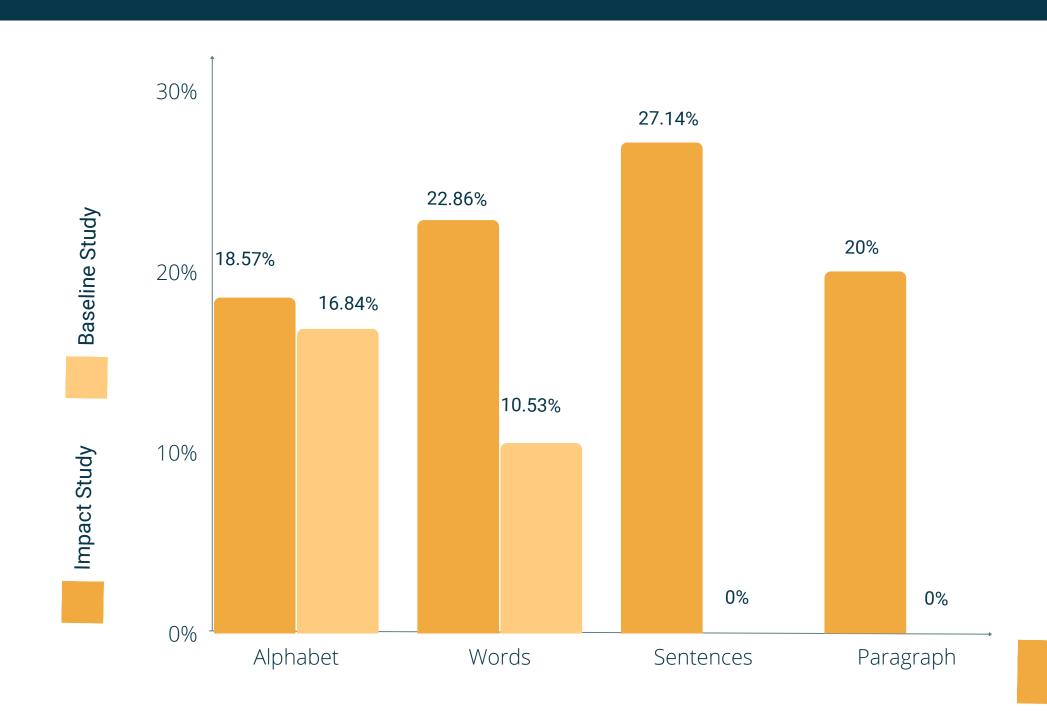
#### **Control School**

#### English Language: Shree Mahendrapriya Basic School



#### **Control School**

#### English Language: Shree Jyotibhanjyang Basic School

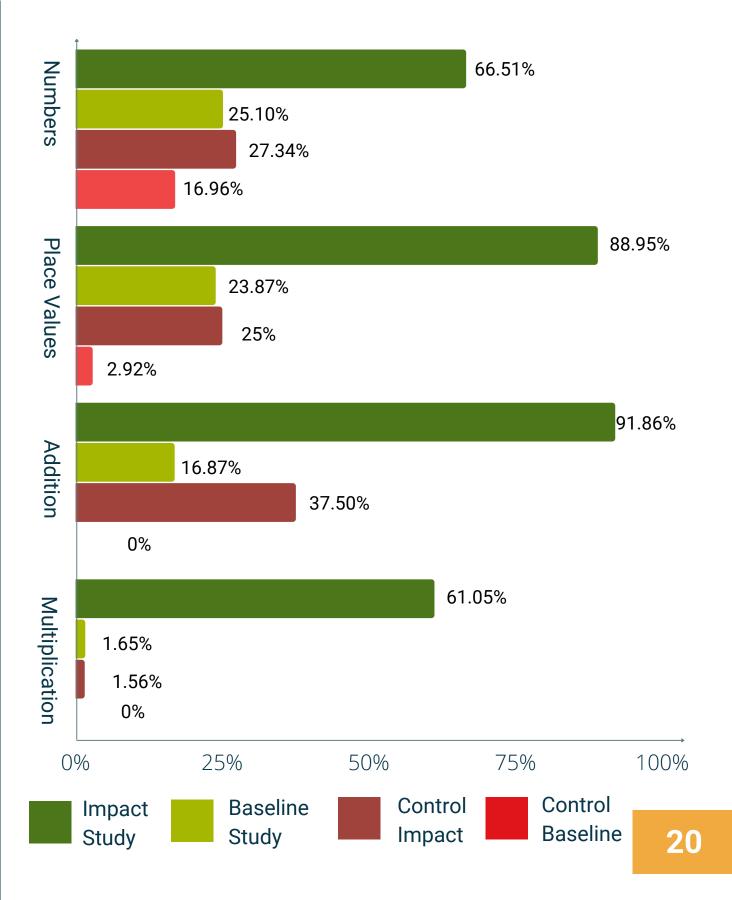


#### NUMERICAL SKILLS

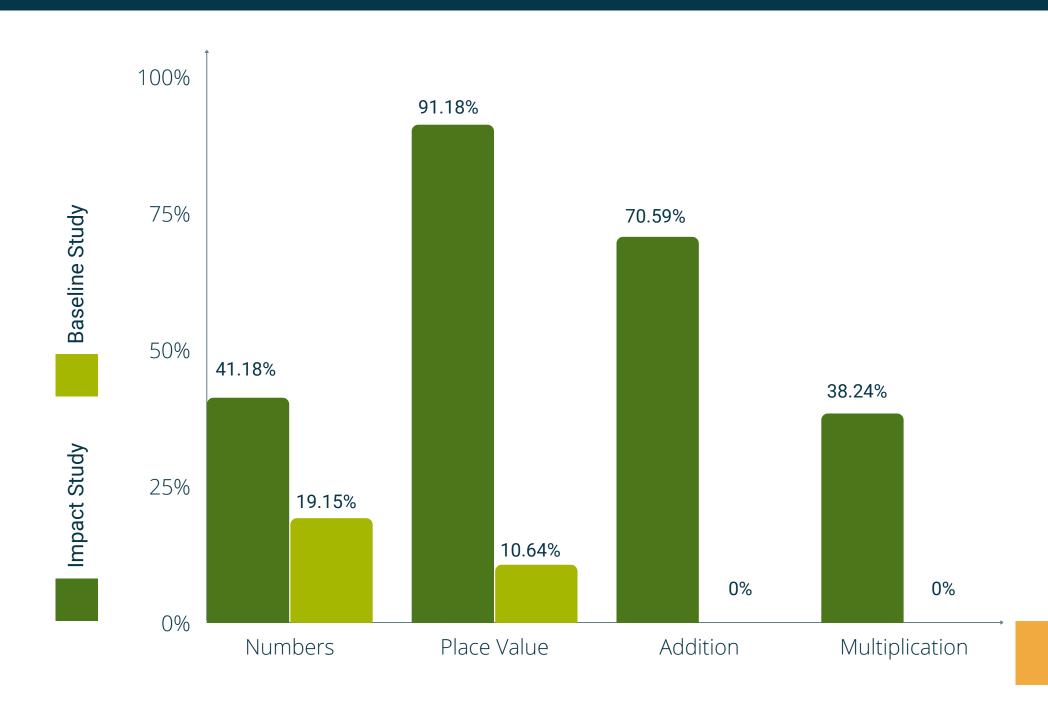
Saathi teachers directly support numerical skills in 5 schools as students take Mathematics as the most challenging subject. Saathi teachers' first worked on removing mathematics anxiety in children using a different approach, like fun activities, projects, etc., to teach.

As it is seen, students have progressed distinctively in terms of addition and multiplication.

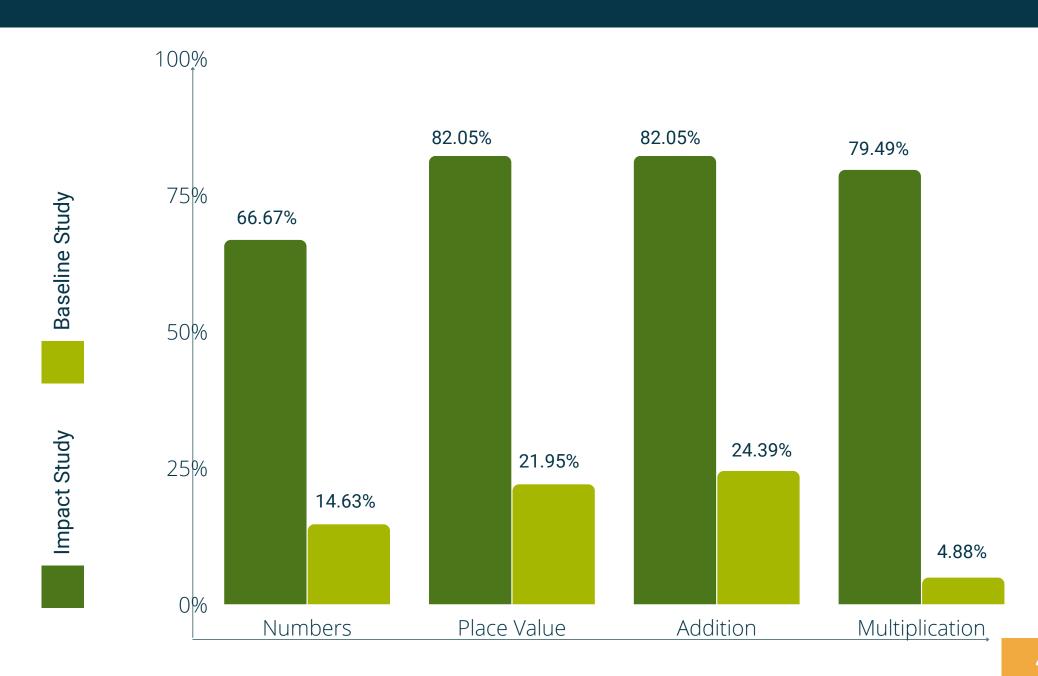
The highest growth is around 70% seen in addition. Saathi teachers are moving forward on other curriculum expectations of the grade level while helping students catch up with basic skills.



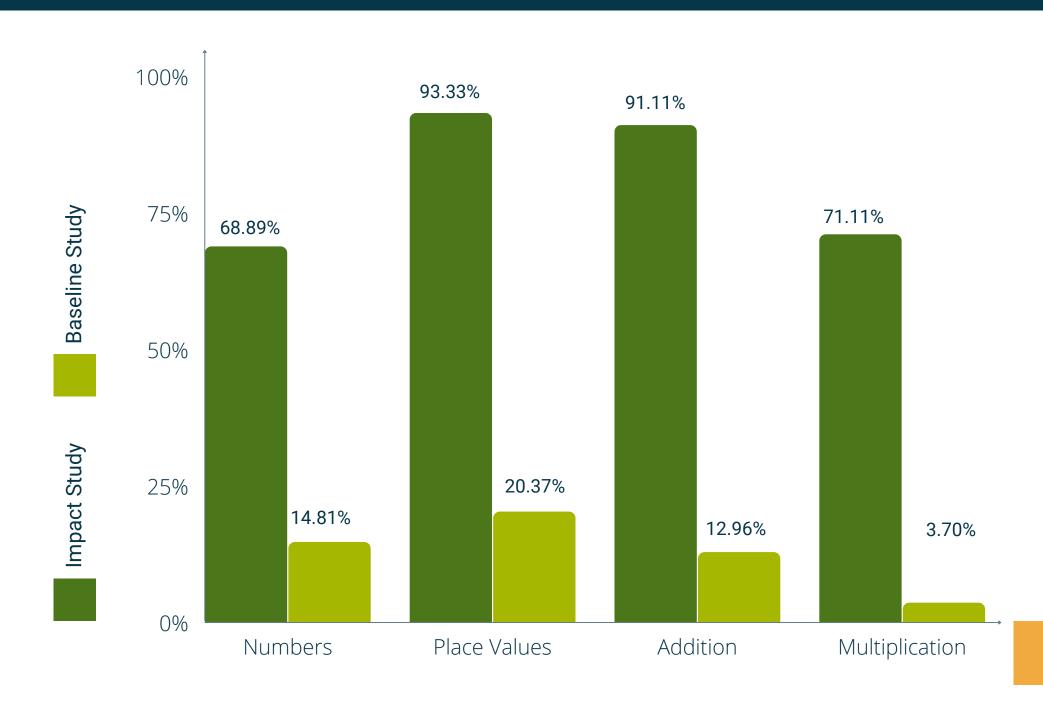
#### **Numerical Skills: Shree Saraswati Basic School**



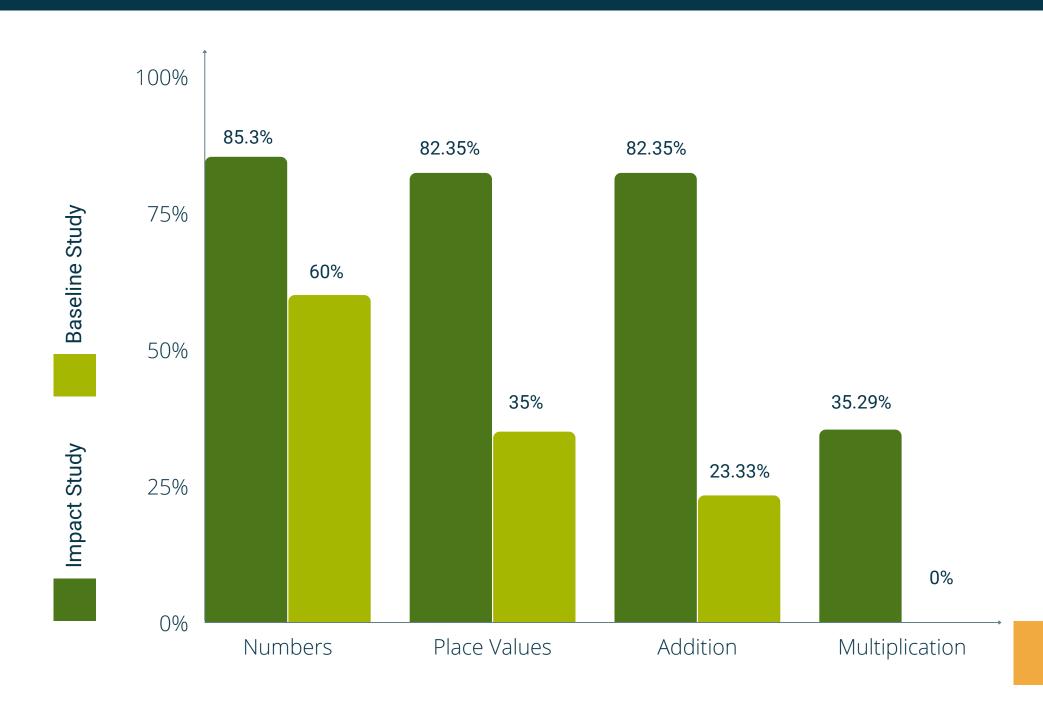
#### **Numerical Skills: Shree Daduwa Basic School**



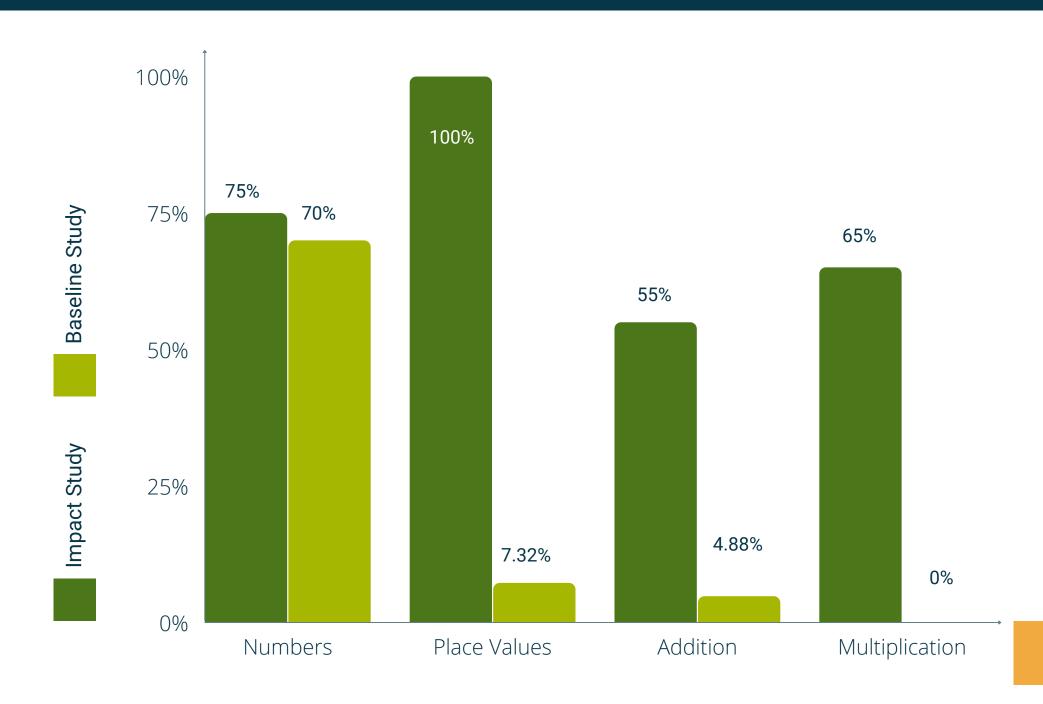
#### Numerical Skills: Shree Pragya Basic School



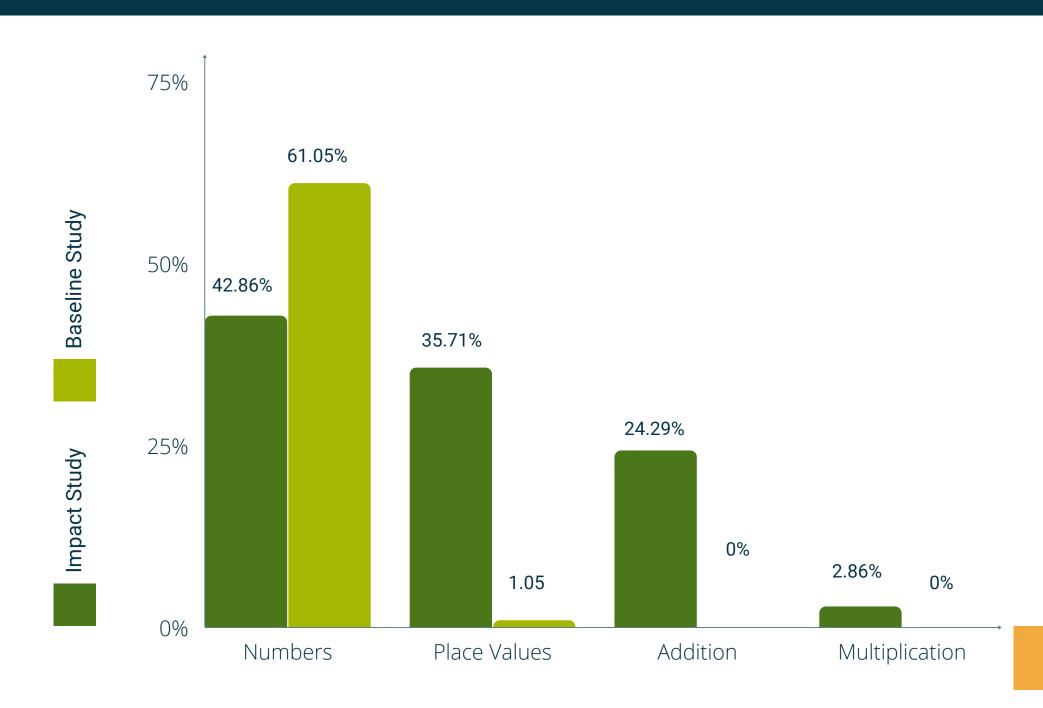
#### **Numerical Skills:** Shree Panchakanya Basic School



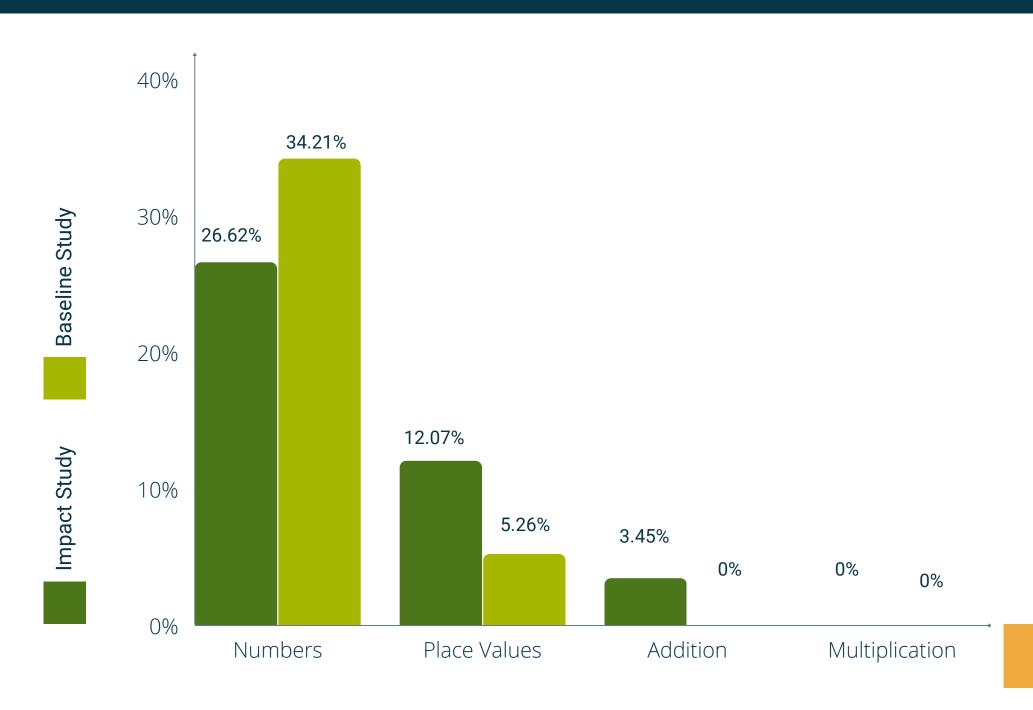
#### **Numerical Skills: Shree Hiradevi Basic School**



# Control School Numerical Skills: ShreeJyotibhanjyang Basic School

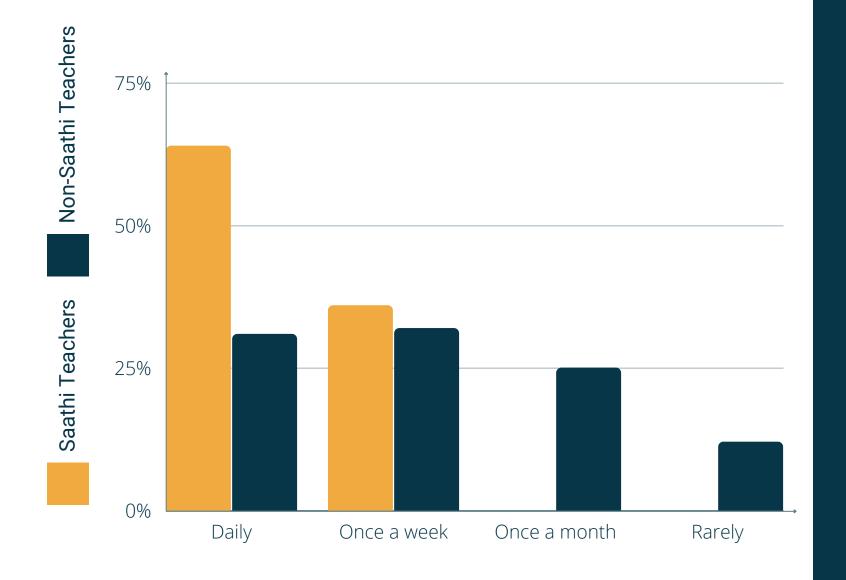


# Control School Numerical Skills: Shree Mahendrapriya Basic School



#### **Teachers Response**

How frequently do you prepare your lessons with activities and materials?



#### Developing

#### **4C Skills**

While Saathi teachers use a lot of activities and materials in their classrooms, our focus should also be on aiding other existing teachers more in their classrooms. Saathi teachers can be equipped with such skills so that they can support existing teachers also.

For the programme's sustainability, it is equally essential for the teachers to catch up with the curriculum, develop skills, and support local teachers.

#### COMMUNICATION

More than

80%

Of students from Saathi, classrooms led assemblies and speak in front of classroom daily.

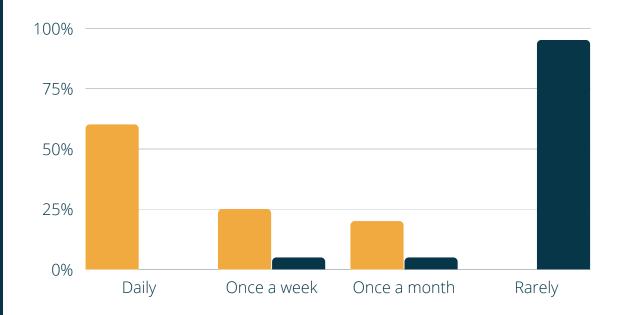
SAATHI TEACHERS ARE
FOSTERING THE
DEVELOPMENT READING
SKILLS IN THEIR
STUDENTS.

92%

Students from the control school tell us that they read new books other than course book.

IT IS A CRUCIAL PART OF LEARNING TO PROVIDE SPACE AND OPPORTUNITY FOR STUDENTS RIGHT FROM A YOUNG AGE.

#### How often do you read new books to find information?



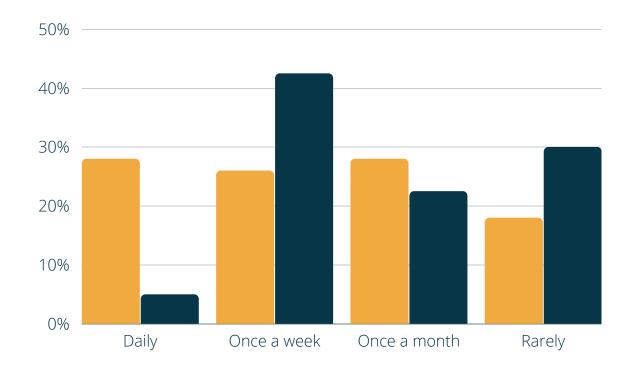
#### How often do you speak in front of everyone in the class?



#### How often do you engage in group work in class?



#### How often do you share your thoughts with friends?



#### **COLLABORATION**

50%

of students taught by Saathi teachers engage in group work daily.

Saathi teachers
encourage group
work in most of
their classes,
improving students'
tendency to learn in
groups.

97%

Students from non- saathi schools did not use the Share-Pair approach to learning

#### **Community Visit**

- Developed a strong connection between students, parents, and teachers that enhanced the learning process for students.
- Helped understand students' backgrounds and psychology and established a friendly environment among them.
- They contributed to creating solid socioeconomic conditions in the community.

#### **Inter-School Competition**

- During their two-year journey, the Saathi cohort from Melamchi organized inter-school competitions engaging basic schools in the vicinity of their cluster.
- Saathi's students participated in ward-level competitions, including quizzes, dance performances, mathematical games, and more.
- Shree Pragya Basic School of Melamchi-7 secured the top position in the ward-level Math and English exams.
- The students travelled to various schools within their municipality and participated in competitions for the first time.

# Saathis in addition to teaching

#### **Excursion**

- Students from all 5 schools took part in the 12th-anniversary celebrations of HELP, where they showcased their talents and presented their culture.
- There was an exchange of culture, knowledge, and sharing among eight different schools of Saathi located in Sindhupalchowk.

#### **Education Fair**

Students from Daduwa Basic School took part in one of the most significant educational events in Sindhupalchowk, the Panchpokhari Learning Fair.



- The disproportionate ratio of teachers and students and unequal availability of resources at the primary level made the Saathi teachers' experience of teaching not the same.
- Most saathi placed schools are in the marginalized community creating a language barrier.
- Saathis contract in Melamchi lasted only for two years, so it was impossible to thoroughly evaluate individual student's growth.
- Tracking the progress of students beyond grade 5 was challenging
- Local government's involvement in saathi evaluation was scarce and weak.



#### A few examples of the many testimonials we received.

Before, I felt leftout in the classroom because teachers used to focus only on the first student in our class but after new teachers came, they treated all students equally and taught us in a friendly manner. They also help me to catch up on things I had missed. Moreover, they never criticised me in the classroom. As a result, I now feel comfortable and willing to attend school.

Ashmita Majhi, Grade 3, Shree Hiradevi Basic School

One of the most significant accomplishments in my life has been fostering a sense of tranquillity in my students. I have always believed that a peaceful mind is the foundation for all that is good, so helping my students achieve a state of calm has been my top priority. Knowing that I have contributed to their well-being in this way gives me great satisfaction.

**Babeeta Shrestha, Saathi Teacher 2021** 

"Thanks to the dedicated efforts of Saathi teachers, we have attained remarkable outcomes at the ward level. Not only are they tirelessly working towards enhancing academic performance, but they are also committed to enhancing the students' overall development. As a result, students are actively engaging in extracurricular activities within the municipal schools. If these teachers were to leave, the students' performance levels would inevitably decline at every level.

Mr Ram Kaji Pandey, Principal of Pragya Basic School

#### SUMMARISING OVERALL IMPACT

Compared to the baseline data, Saathi teachers have significantly improved their classrooms.

They organized their lessons effectively, with clear objectives achieved, resulting in high student engagement and participation levels. All Saathi teachers demonstrated a high standard of teaching, which has led to improved student learning outcomes. Other teachers in the schools also recognized the positive impact of Saathi teachers, noting that students now exhibit better behaviour, are happier, and attend school more regularly. Saathi teachers have also shared personal statements of how they have provided extra support to individual children, especially those experiencing challenging family circumstances, by offering additional classes before and after school hours.

Saathi teachers started their journey by establishing norms and values, building classroom and school culture, gaining trust, and creating a bond with students, existing teachers, and parents. They focused on classroom and behaviour management, creating engaging lessons and group work. These efforts allowed Saathi teachers to establish closer relationships with their students and better understand their needs.

The Saathi Teacher programme is further supported by the fact that the teachers who worked as Saathis are now interested in pursuing careers in education as teachers or educational leaders. This demonstrates the sustainability and potential for positive change inherent in the program.

# Reflecting on our Learnings

Although Saathi teachers use many classroom activities and materials, supporting other teachers in changing their teaching style is essential.

To achieve this, Saathi teachers and other teachers at the school can be trained in these skills.

For the programme to be sustainable, all teachers must keep up with the curriculum, develop their skills, and support each other locally.

#### FROM THE FIELD



Students from Daduwa BS (left) and Pragya BS (right) work in groups in the facilitation of Saathi teachers in their classrooms.



**Student Impact Report | 2023** 







Students are
learning numbers
and alphabets by
actively
participating in fun
activities and
creating materials.
Saathi Teacher with
their students for a
excursion.

#### **Student Impact Report | 2023**

# It is acknowledged that teachers play a crucial role in ensuring quality education at the foundational level, despite the numerous tools and technologies developed to aid students. As such, they remain instrumental in fostering the skills and mindset of children. More robust Support Network and System Providing them with adequate care and support will encourage them to replicate

the same behaviours in their students. This can be achieved through fast

communication tools, regular reflection meetings, and mentorship programmes.

#### **Expansion of the Saathi Teachers Programme**

We aim to expand the programme further by building on the success of Saathi's first and second cohorts. By May 2023, we will place 15 new Saathi teachers who will be going to 10 primary schools in partnership with local governments.

#### Support us in the movement



#### A joint partnership programme of



