Increasing the numerical, language and learning skills of students in rural schools of Sindhupalchowk

**STUDENT IMPACT REPORT
2021**

**Helambu Education &
Livelihood Partnership (HELP)**

MONDO FOUNDATION
LOCALLY-LED RESPONSES TO GLOBAL CHALLENGES

Listening to Our Executive Director

Why measure our impact?

In Nepal, highly qualified teachers tend to move to a secondary and higher secondary level even though the government had appointed them for the primary level. As a result, there is a huge scarcity of competent teachers. Saathi Programme is currently running in 5 basic schools in PanchPokhari-Thangpal RM, Sindhupalchwok, where 10 Saathi teachers have been placed after 21 days long residential training.

As a grassroots organisation, we have the dual responsibility of scaling a sustainable intervention model for a local government and being responsible to the donors and supporters.

Measuring impact provides us with current metrics and challenges us to expand the impact we can provide, and pushes us to develop more profound solutions for the under-resourced schools. Quality Education is a challenge that we must embrace and solve. To this end, we are assessing impact not because we owe it to our investors, though, of course, we do, but because we exist for our beneficiaries. It is the latter whom our impact evaluation is ultimately serving.

Jimmy Lama, Executive Director, HELP

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Introduction

Bridging the gap between public and private school students.

HELP Saathi Programme is two years of teaching placement, working in pairs, for qualified and passionate young people to teach at basic level schools struggling with a shortage of teachers in rural communities.

This programme started from our fundamental belief that to change the quality of public schools, there must be a concentrated and coordinated effort to alter the way education is delivered at the foundation level in terms of ensuring the availability of quality teachers, an enabling environment and adequate resources. 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 our intensive 21-day HELP Saathi School (residential, pre-service training) designed to focus on the practice-theory-practice approach primarily. At this school, the Saathis are equipped and empowered with the basic understanding, knowledge, methods and self-exploratory tools and resources to apply to support the learning process of the children they will teach.

Learning Skills

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

Literacy skills allow children to explore how language works and to use this knowledge in a variety of 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 application. Children need to have numeracy skills because they are equally as important as literacy skills for proficiency in society. Numeracy includes number, shape, time, problem-solving and handling data, all of which are needed in everyday life.

Language SKills

Numerical Skills

STRONG FOUNDATION

Creativity

Critical Thinking

Collaboration

Communication

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 to think 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.

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VISION

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

Aligning HELP Saathi to the SDG GOALS

4 QUALITY EDUCATION

TARGET 4·1	TARGET 4·2	TARGET 4·4
FREE PRIMARY AND SECONDARY EDUCATION	EQUAL ACCESS TO QUALITY PRE-PRIMARY EDUCATION	INCREASE THE NUMBER OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS

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.

Methodology

This impact evaluation used a before-after approach to measure students' learning achievements in terms of literacy and numerical skills. Also, a control school approach was selected to assess the comparative impact of schools in terms of 4C in the same region that do not have Saathi Teachers due to the lack of baseline study of 4C. The study was conducted in 5 Saathi schools and 1 control school in Panchpokhari rural municipality involving more than 700 students. The control school was recommended by the rural municipality, one of the top-performing primary schools in this region.

Step 1: Metric definition and design
First, we defined metrics to measure the numerical and language literacy of the students. A standard set of questions were designed, focussing on basic skills. Numerical skills were assessed using number counting, place value and basic numerical operations. A standard survey was used to assess the 4C skills of students. The questions set were the same from Grade 2-5.

Step 2: Conduct Surveys
We then ran surveys across 5 placement schools of HELP Saathi Teachers and 1 control school of Panchpokhari Thangpal Rural Municipality. The survey was conducted for Grade 2 to Grade 5. The control school was identical to Saathi Placement Schools as it was also a primary schools (Grade 1-5) with a similar number of students. The local diversity is also similar to the placement schools.

Step 3: Record and Analysis
The answer sheets were examined on a 3 point scale, namely: good, average, poor. If the student had more than 75% correct answers, then it was rated as good. Around 50-75% correct was rated as average. And less than 50% as poor.

Survey results were recorded as they are, along with the frequency of occurrence for each question.

Our limitations of Impact Study

Though we tried to minimize all the loopholes to get the correct data, there were some limitations to this survey:

ANSWERS

We encouraged students to write 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

Though we tried to design questions as simple as possible, some students might have found those questions completely new and couldn't answer them just because they were not habituated to those types of surveys and worksheets.

UNEQUAL SAMPLE SPACES

There were around 600 students from the Saathi schools, while only around 100 students were assessed as a control group from schools where Saathi teachers were not placed.

COVID-19

Schools were closed for more than 7 months and just reopened 2 months before the impact study. Saathi teachers could not follow up sufficiently, and this has limited the outcome we have worked for.

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 learning achievement of the students 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 who are 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 government with less number of teachers in the primary region
- Select high need schools and deploy Saathi Teachers in a pair for 2 years
- Regularly observe classrooms and provide feedback for teachers
- Run training and leadership development workshops for teachers throughout their placement
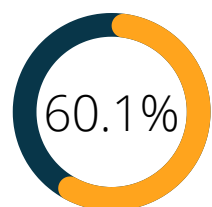- Conduct baseline and impact survey to assess the impact
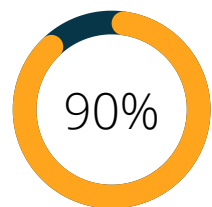
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WHAT WE FOUND OUT IN BASELINE SURVEY?
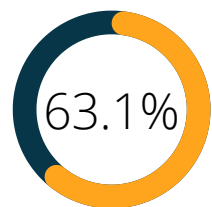
**63.1%** — Of students of class 1 to, 5 they cannot write a word like door, house, mango, etc., with the picture and some alphabet.
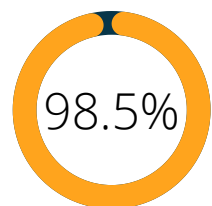
98.5% — of the total, students cannot write a proper sentence with the given jumbled words. (is / a / boy /he)
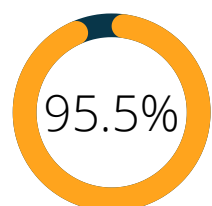
60.1% — Students from class 1 to 5 cannot write Nepali words with respective pictures given.

90% — Students of class 3 don't know where to use a full stop and question mark.
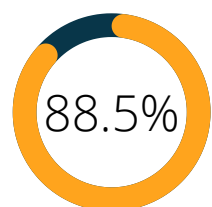
88.5% — Students of class 3 cannot make a sentence with the given jumbled words in Nepali.

95.5% — Students of class 3 to 5 cannot add 2 numbers of 3 digits (369+674) which is the requirement of class 3.

BASELINE SURVEY

Given the context that HELP Saathi teachers will be working in a school for 2 years, we needed some baseline to measure their impact during their placement. Saathi teachers teach Maths, English and Science. So, we took the diagnostic test of Maths and English in November 2019 in Saathi Schools.

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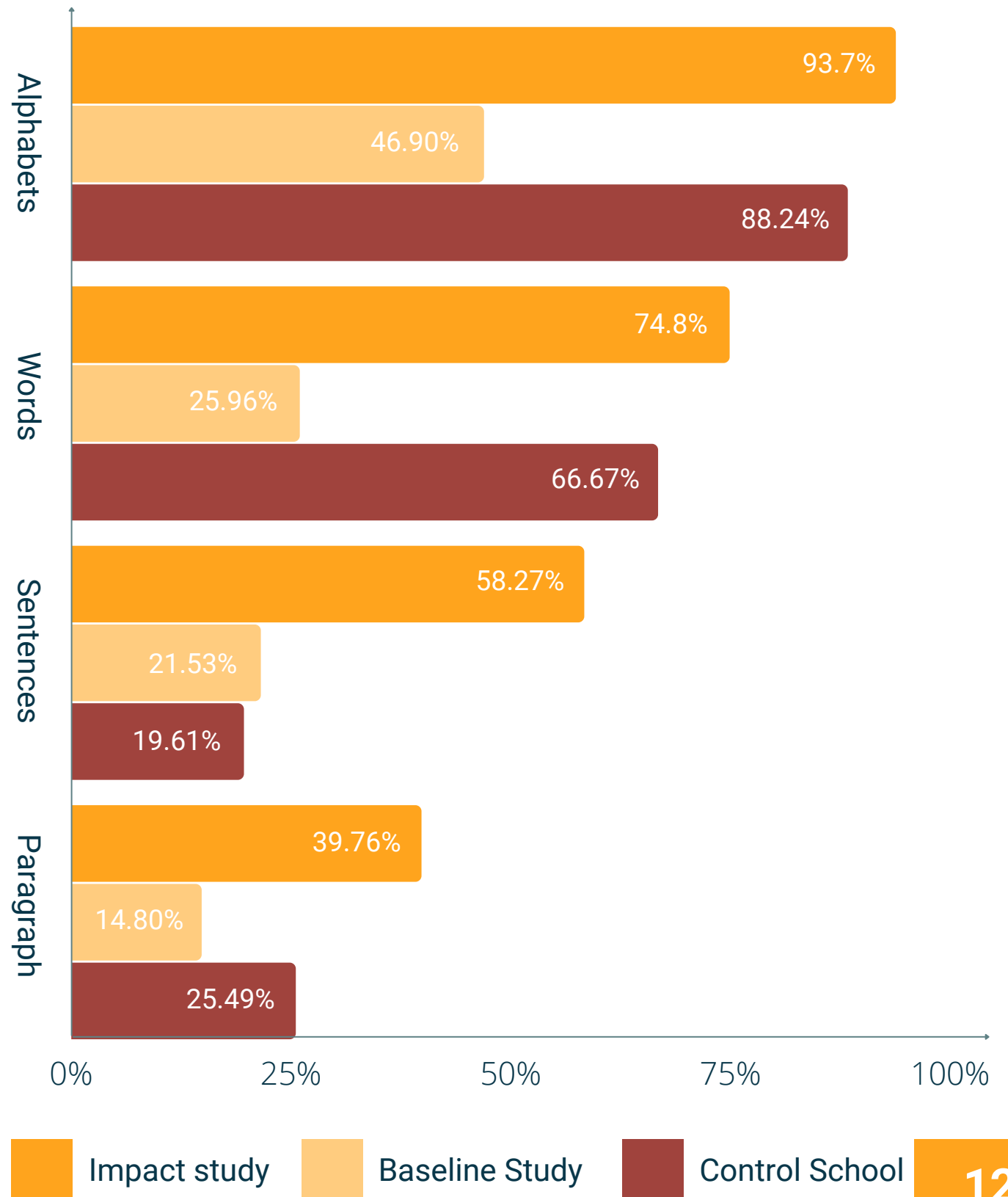
LANGUAGE SKILL: ENGLISH

Our 4 Saathi teachers directly support the students in the English language. We have seen significant growth of students learning competencies in term of the English language.
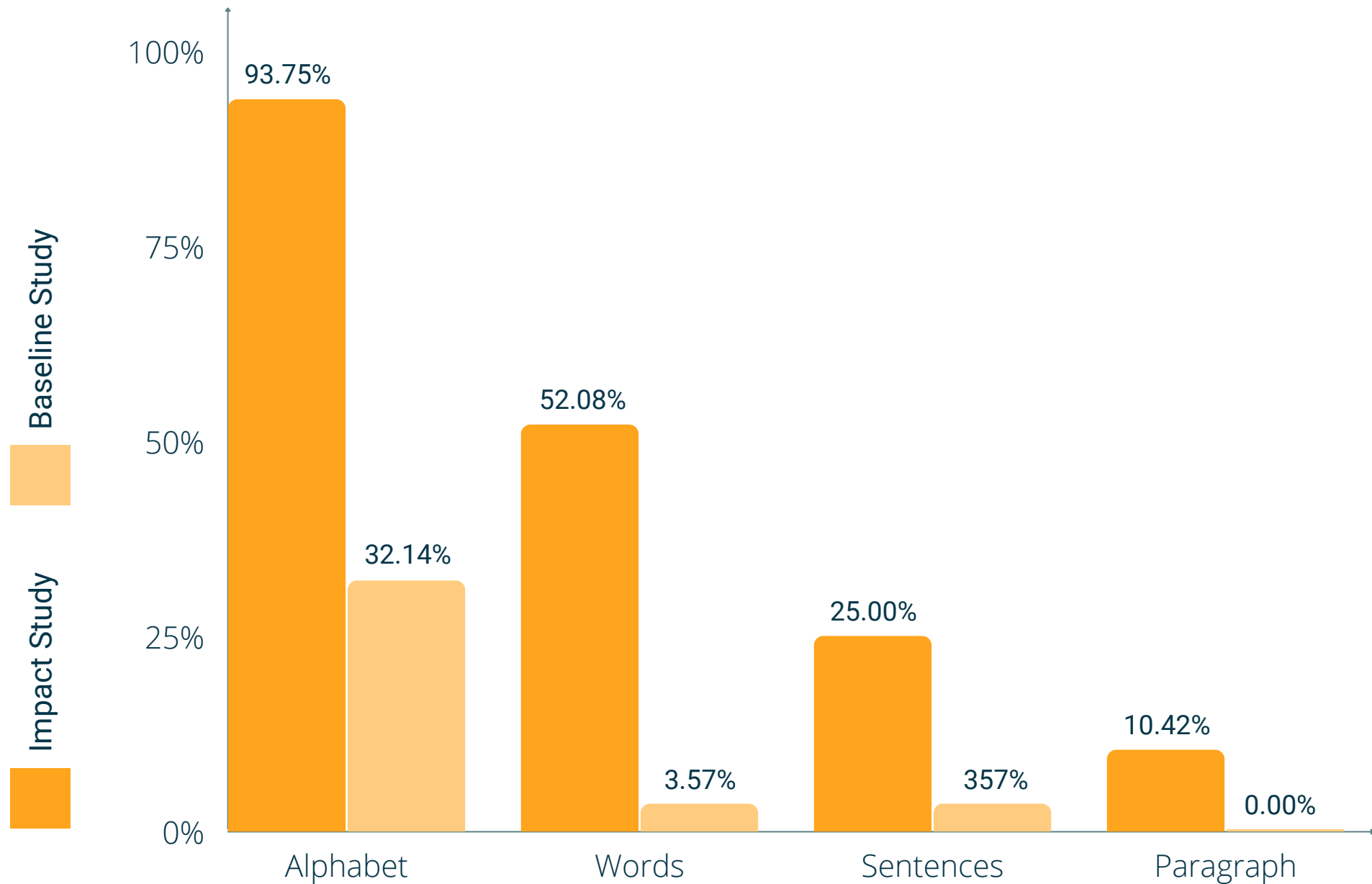
While around 75% of students could not even write a proper word during baseline, around 75% of the students can easily write the words using a picture and jumbled words.

We also saw a huge growth of students' learning competencies in Taltuleshwori School, where all the subjects are taught in English medium, which helped develop the students' literacy skills.
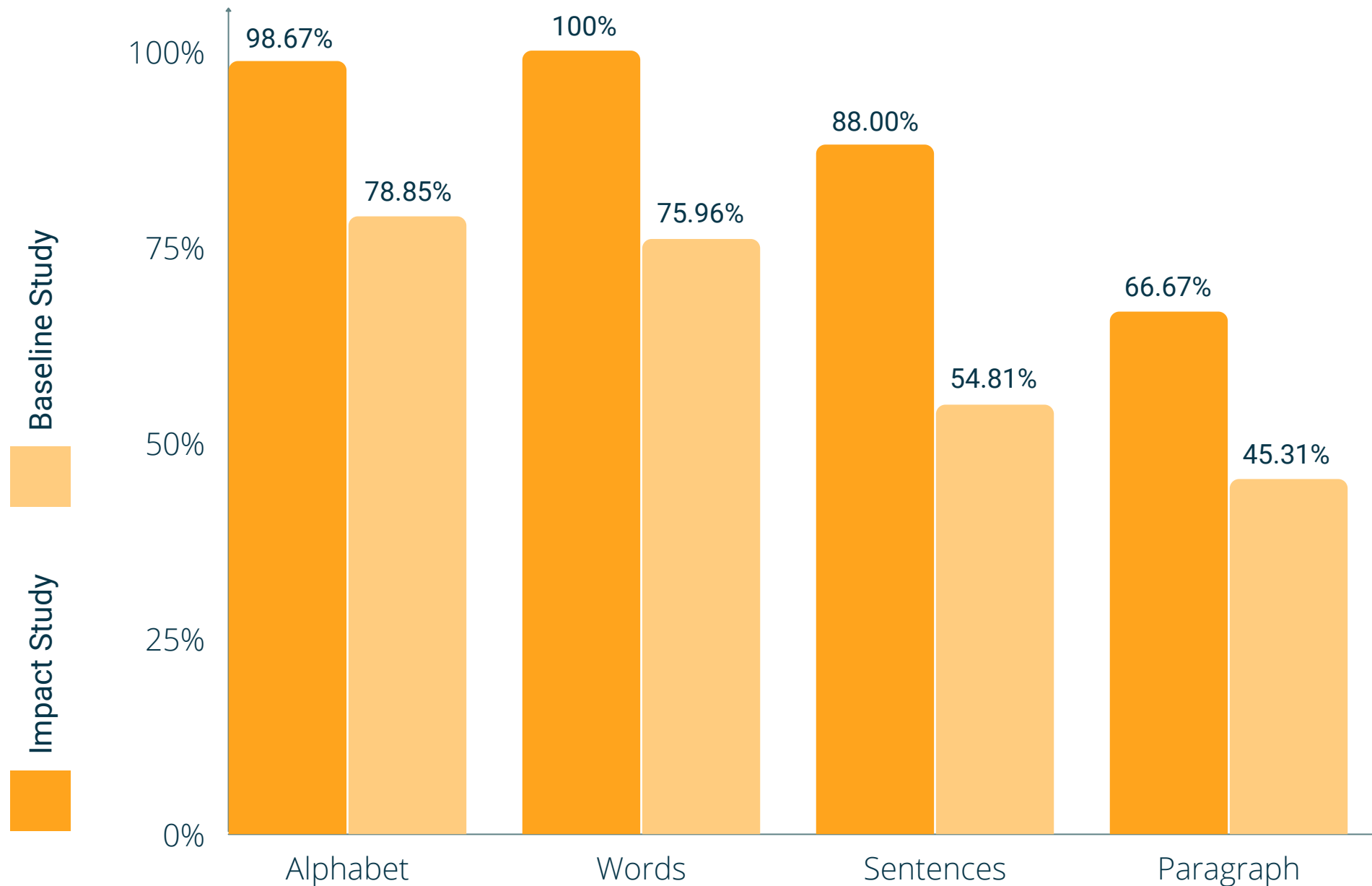
Compared to the control school, which happens to be one of the well-performing primary schools in the region, our Saathi schools perform well.
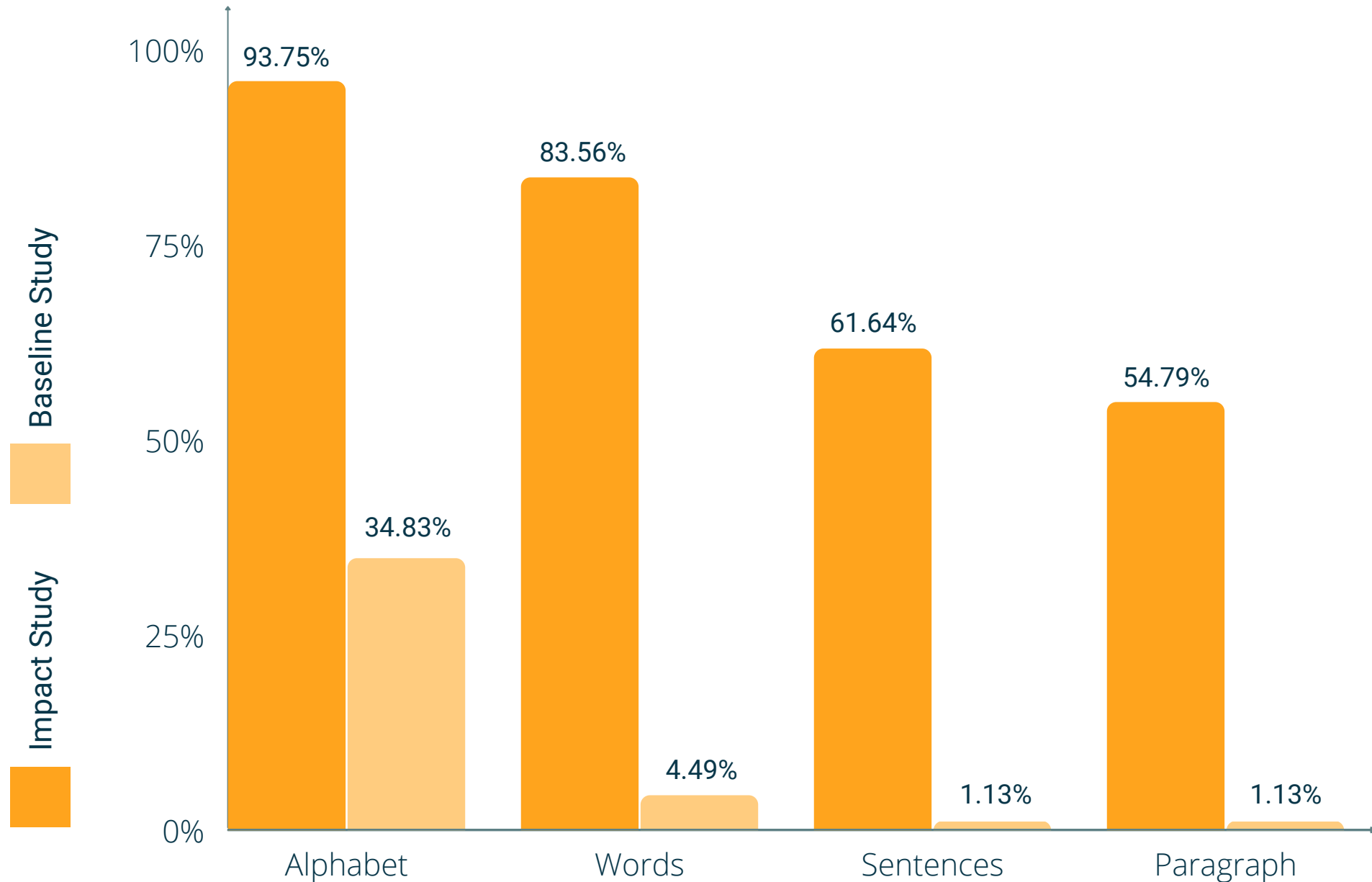
Alphabets
- Impact study: 93.7%
- Baseline Study: 46.90%
- Control School: 88.24%

Words
- Impact study: 74.8%
- Baseline Study: 25.96%
- Control School: 66.67%

Sentences
- Impact study: 58.27%
- Baseline Study: 21.53%
- Control School: 19.61%

Paragraph
- Impact study: 39.76%
- Baseline Study: 14.80%
- Control School: 25.49%

Legend: Impact study | Baseline Study | Control School

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English Language: Satkanya Basic School

English Language: Taltuleshwori Basic School

Baseline Study

Impact Study

	Alphabet	Words	Sentences	Paragraph
Baseline Study	98.67%	100%	88.00%	66.67%
Impact Study	78.85%	75.96%	54.81%	45.31%

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English Language: Bachchhalamai Basic School

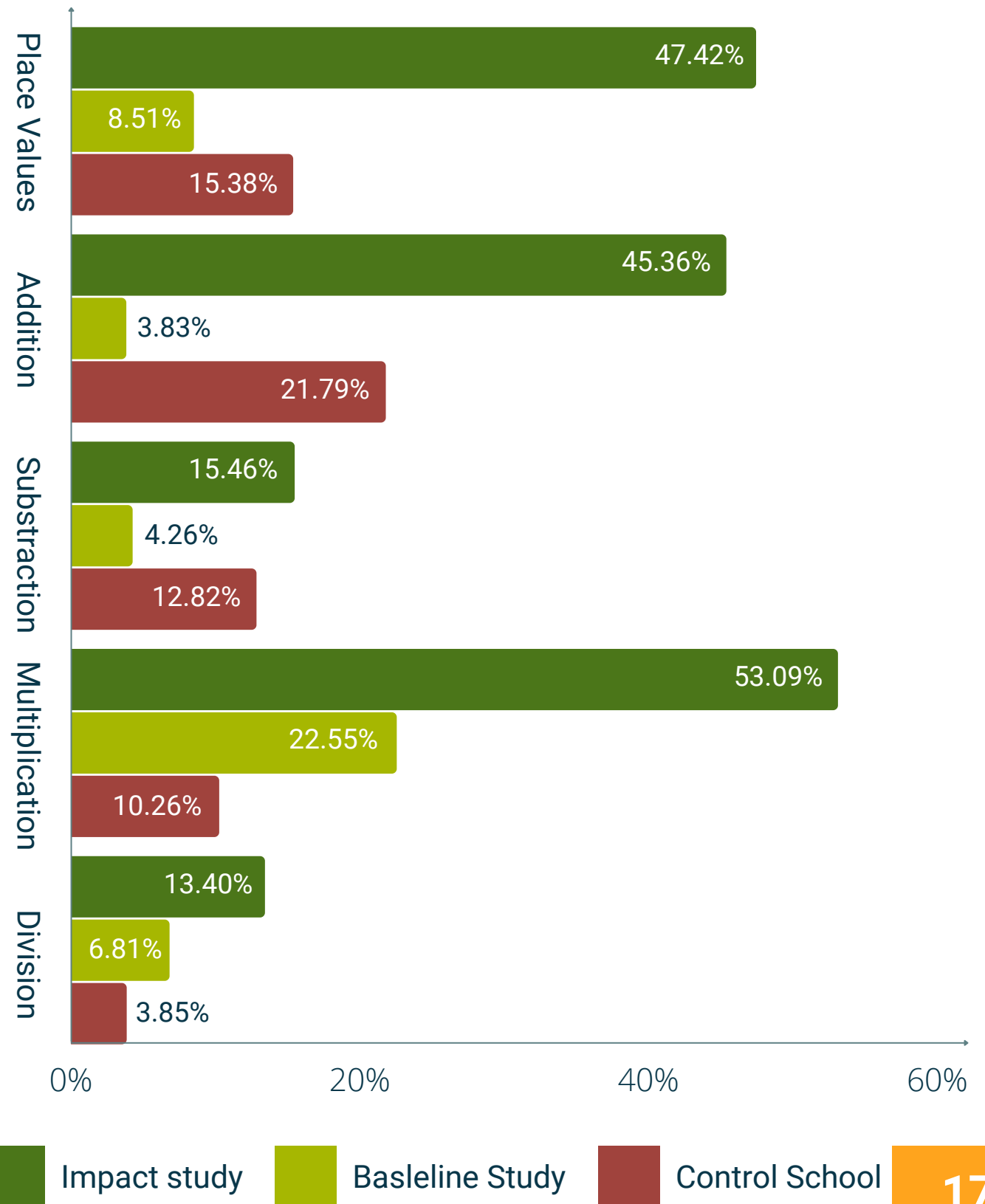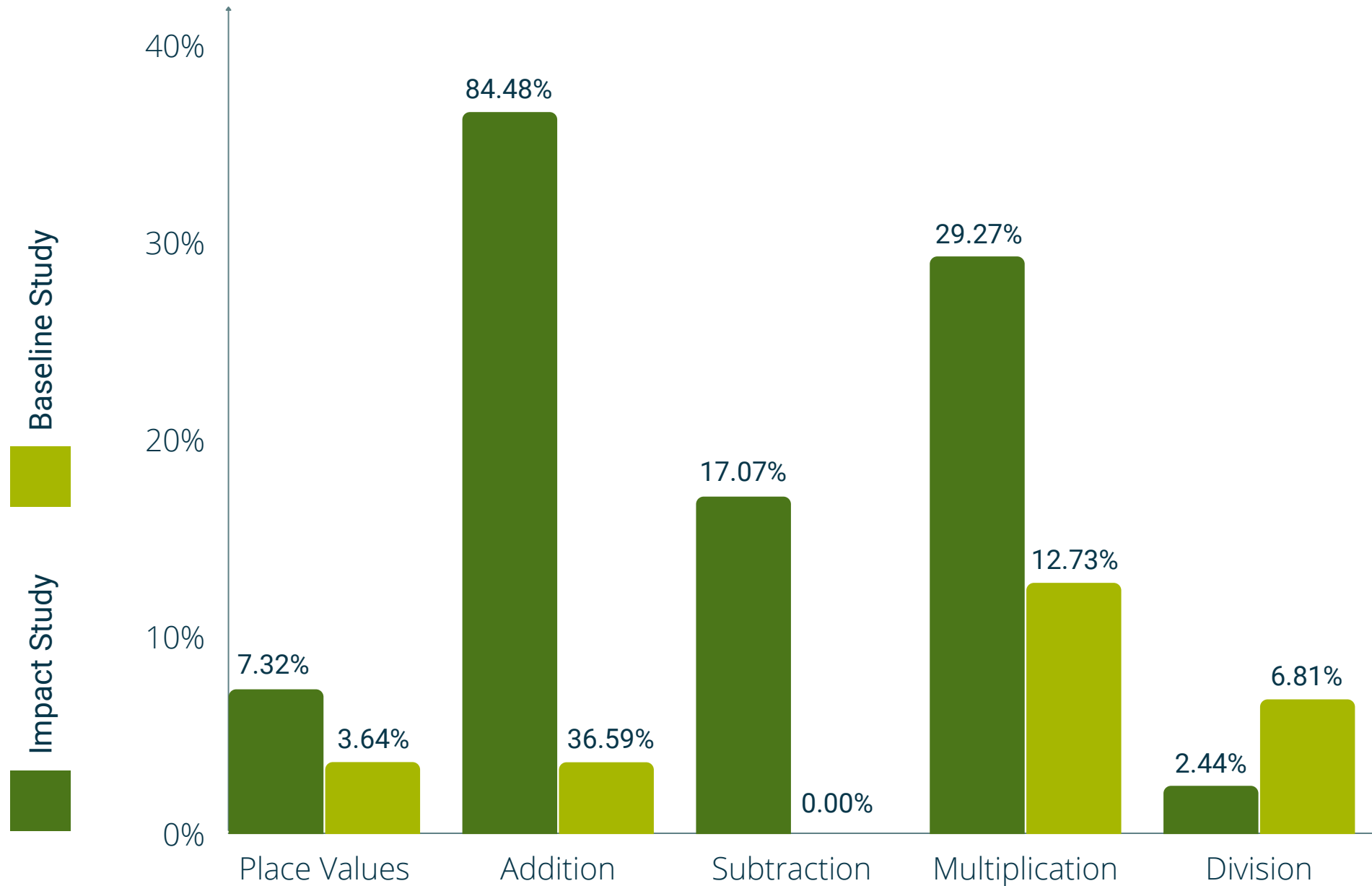# English Language: Saraswati Basic School
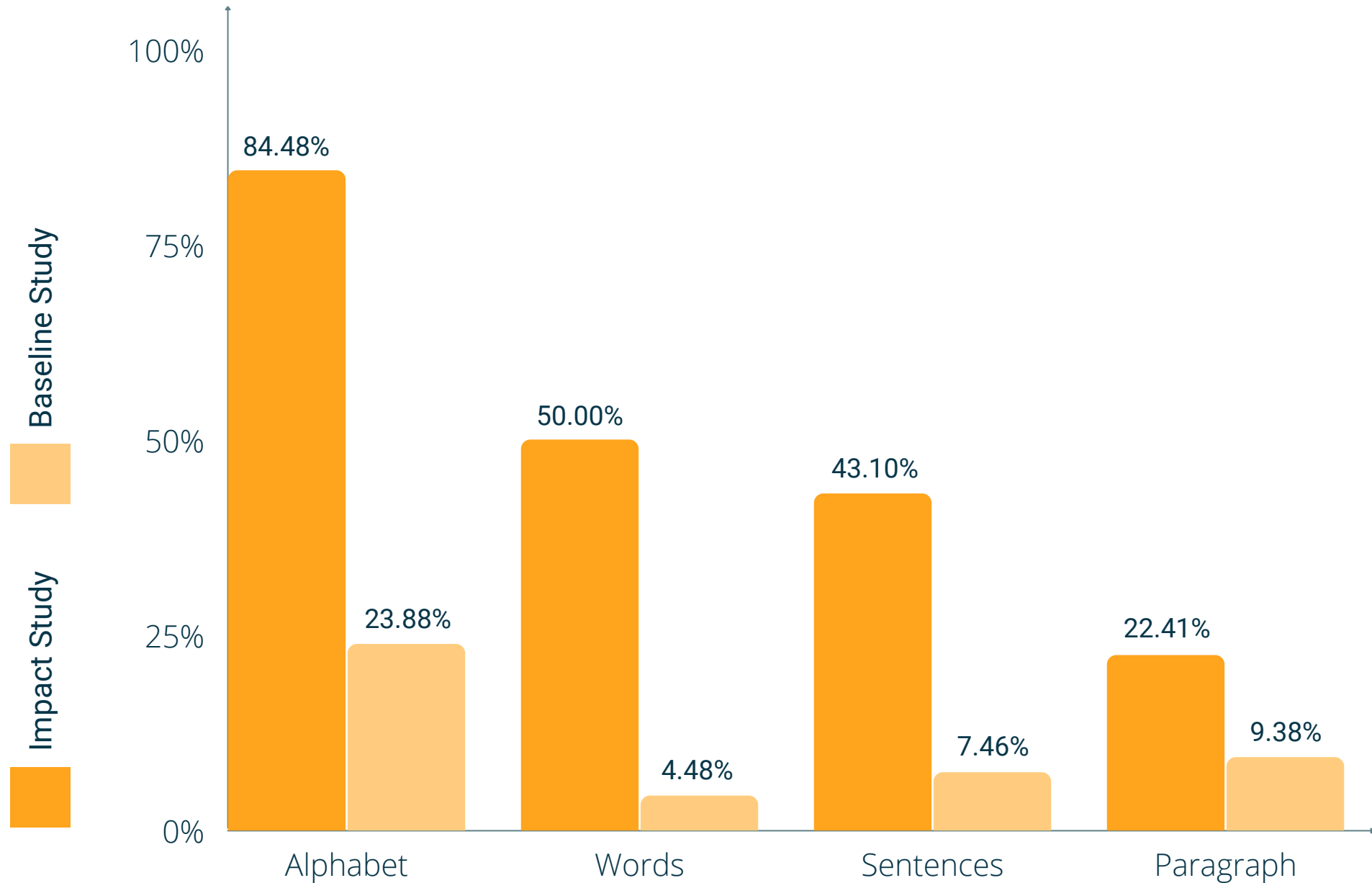
NUMERICAL SKILLS

Saathi teachers directly support numerical skills in 3 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 impact is not much in terms of subtraction and division in comparison. This might be because Saathi teachers could not support fully for 2 years; the schools were closed for more than 9 months due to the pandemic.
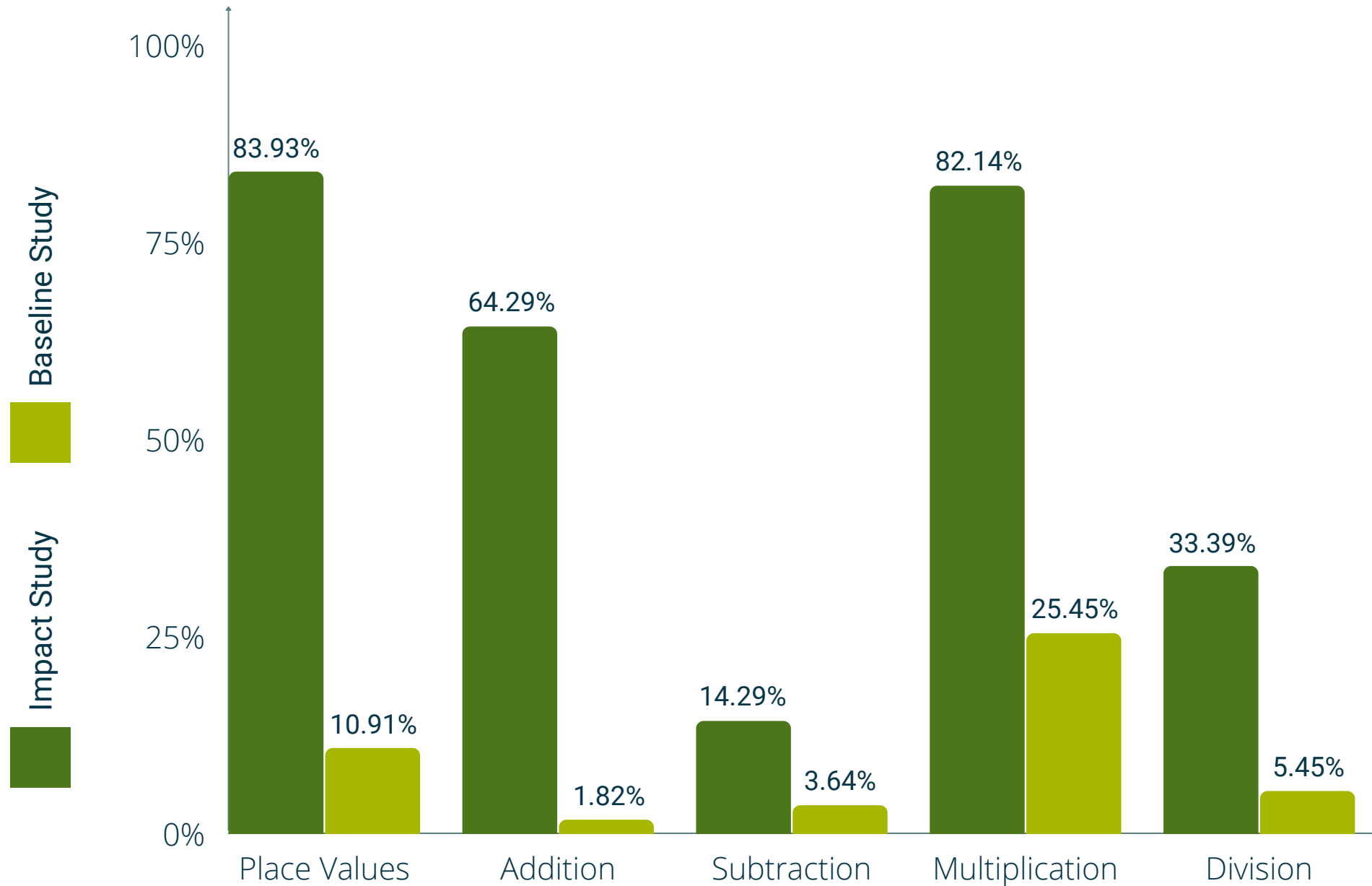
The highest growth is around 40% seen in addition. Saathi teachers are moving forward on other curriculum expectations of the grade level while helping students catch up with basic skills.

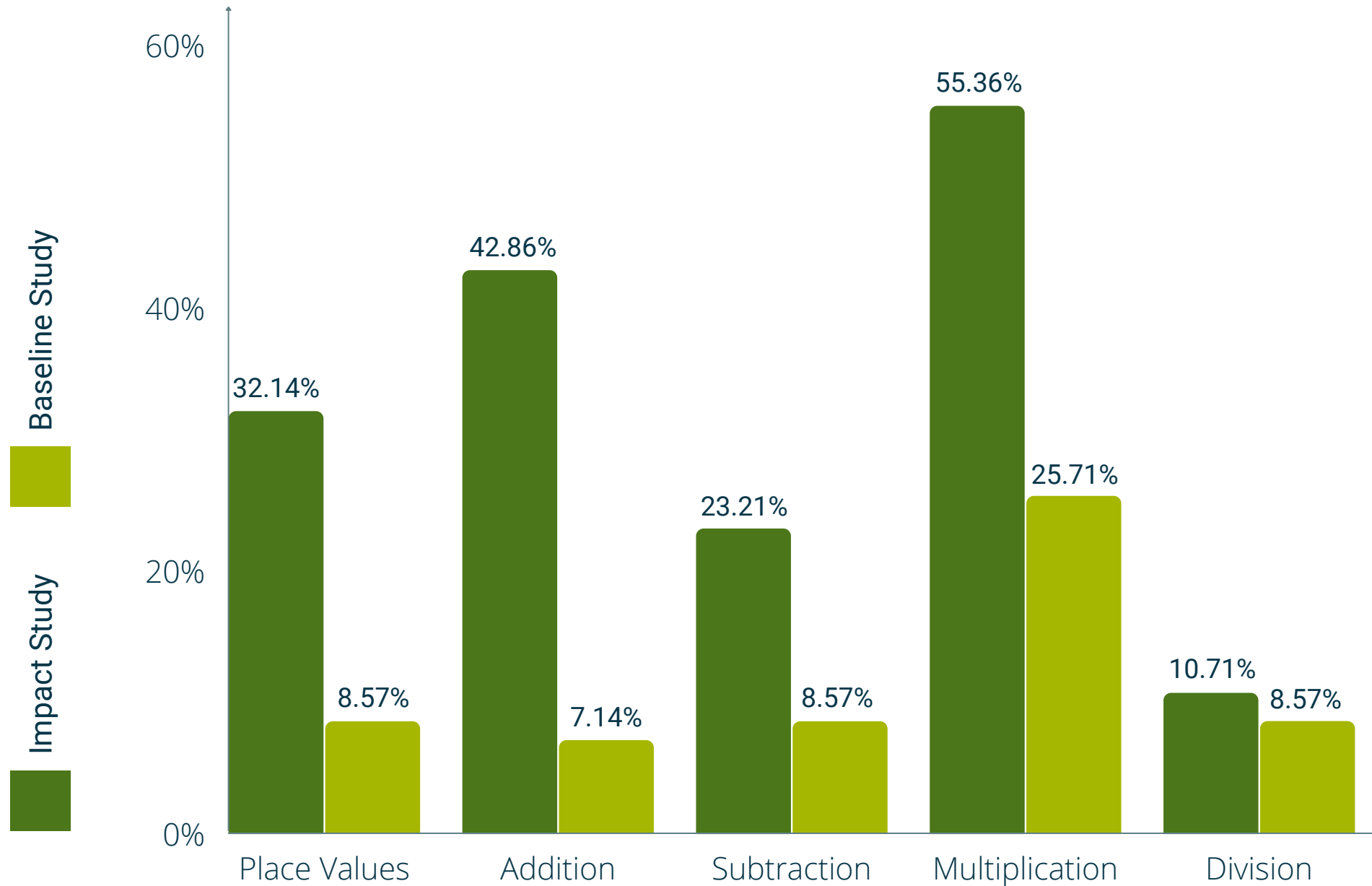|	Impact study	Basleline Study	Control School
Place Values	47.42%	8.51%	15.38%
Addition	45.36%	3.83%	21.79%
Substraction	15.46%	4.26%	12.82%
Multiplication	53.09%	22.55%	10.26%
Division	13.40%	6.81%	3.85%

Numerical Skills: Golmeshwory Basic School

Baseline Study
Impact Study

- Place Values: 83.93% / 10.91%
- Addition: 64.29% / 1.82%
- Subtraction: 14.29% / 3.64%
- Multiplication: 82.14% / 25.45%
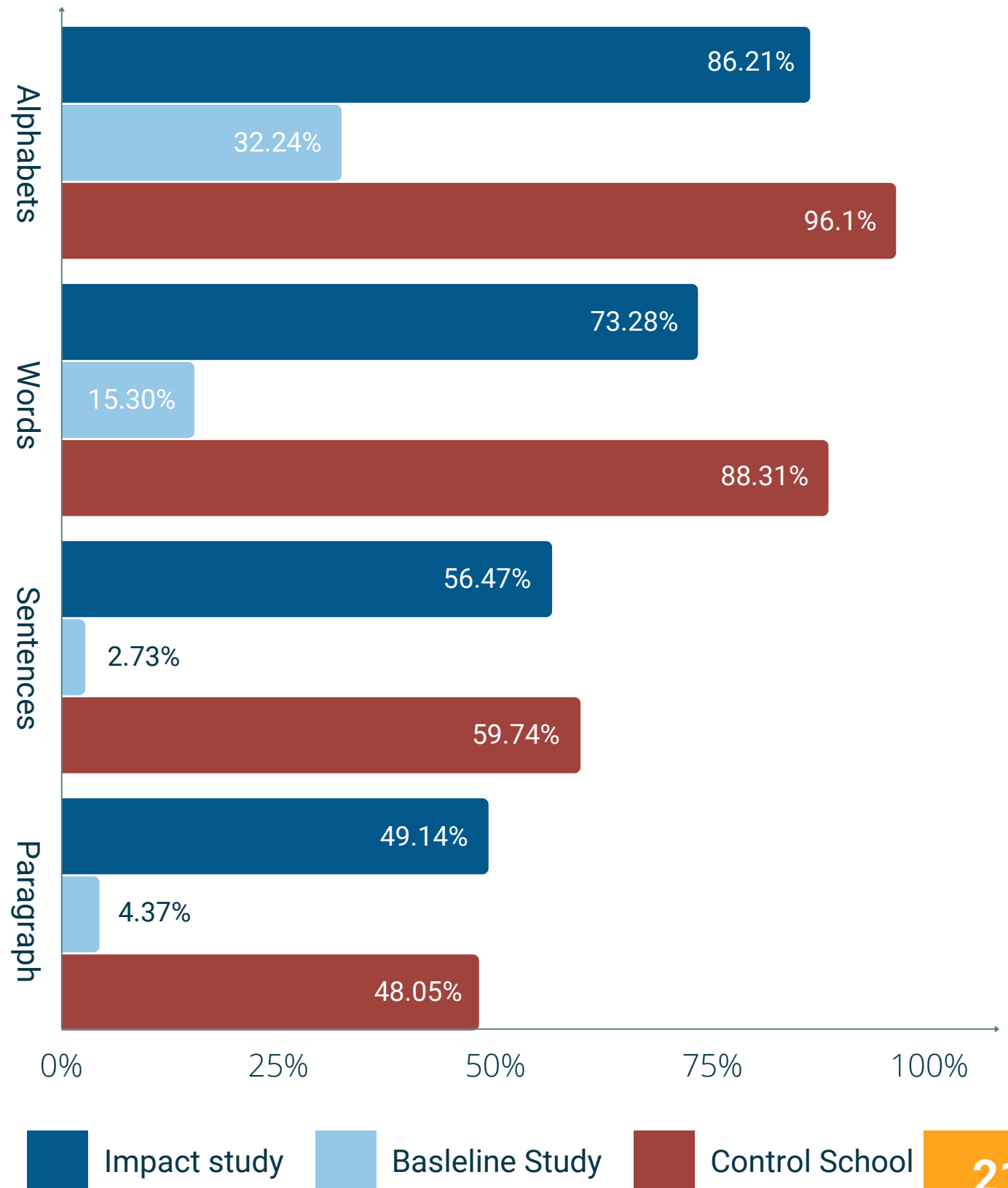- Division: 33.39% / 5.45%

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NEPALI LANGUAGE

Saathi teachers didn't directly teach Nepali subjects in the classroom, but 2 of our Saathi teachers support the Nepali language by teaching science in the Nepali language.

Saathi teachers had worked to increase the Nepali language communication in students through ECA activities and support the local teachers who teach Nepali.

As the students learning achievement has increased from the baseline. The results are on par with the control school. Although our main focus will be on recruiting Maths and English subject teachers, we will still focus on developing the Nepali language skills indirectly and supporting the students.

Alphabets
- Impact study: 86.21%
- Basleline Study: 32.24%
- Control School: 96.1%

Words
- Impact study: 73.28%
- Basleline Study: 15.30%
- Control School: 88.31%

Sentences
- Impact study: 56.47%
- Basleline Study: 2.73%
- Control School: 59.74%

Paragraph
- Impact study: 49.14%
- Basleline Study: 4.37%
- Control School: 48.05%

Legend:
- Impact study
- Basleline Study
- Control School

WHEN WE ASKED THE TEACHERS.

How often do you prepare activites and materials for 4C in your lessons?
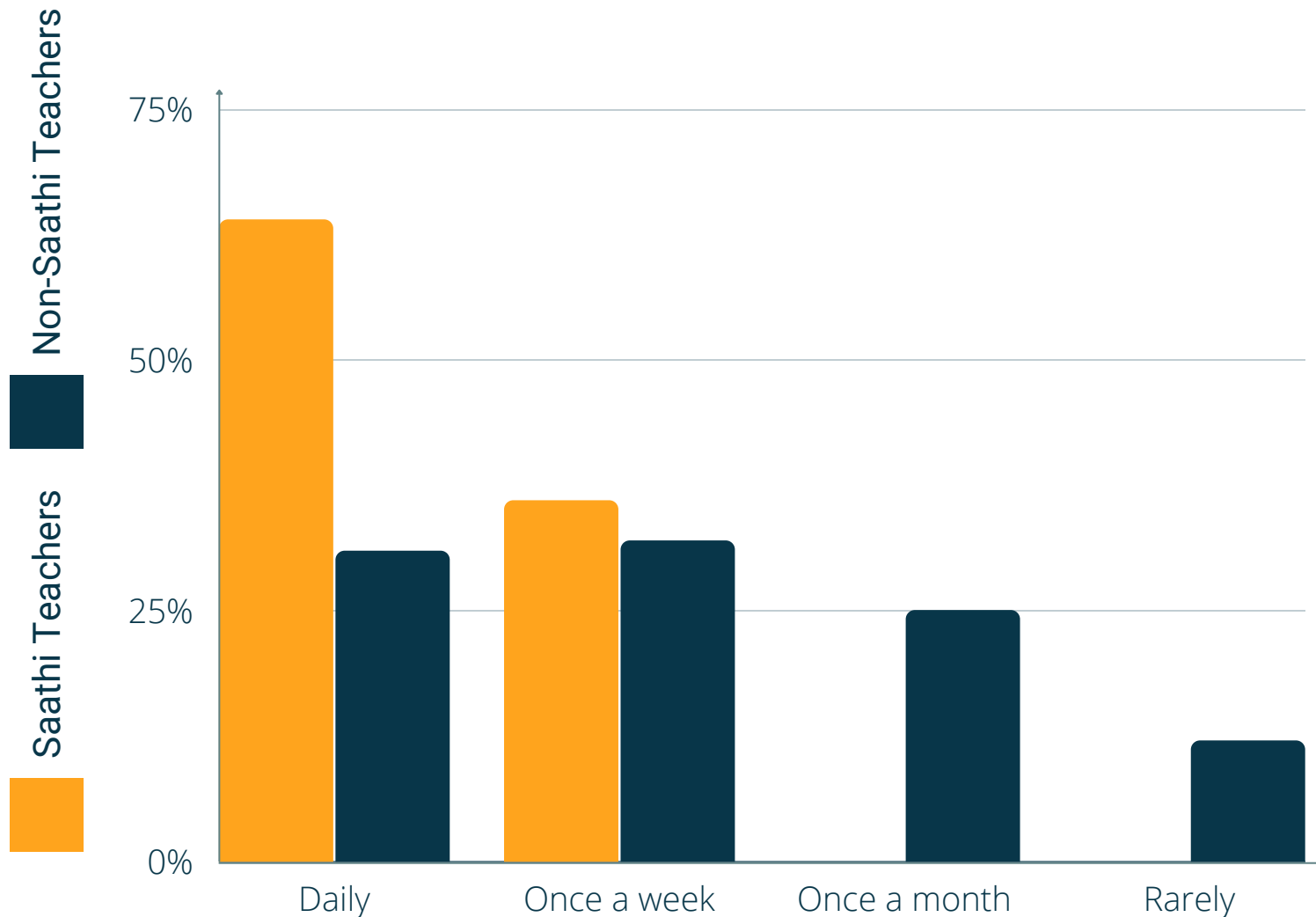
4C Skills

While Saathi teachers are using a lot of activities and materials in their classrooms. Our focus should also be in aid of 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 important for the teachers to catch up with the curriculum, develop skills, and support local teachers.

COMMUNICATION

95%

students from control school tell us that they do not read books for new information
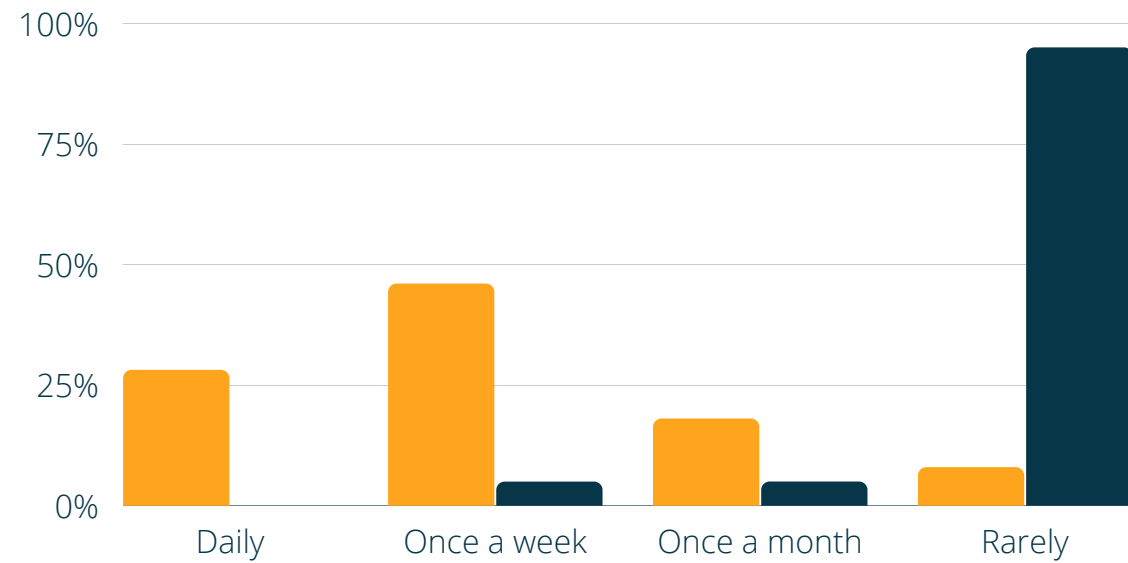
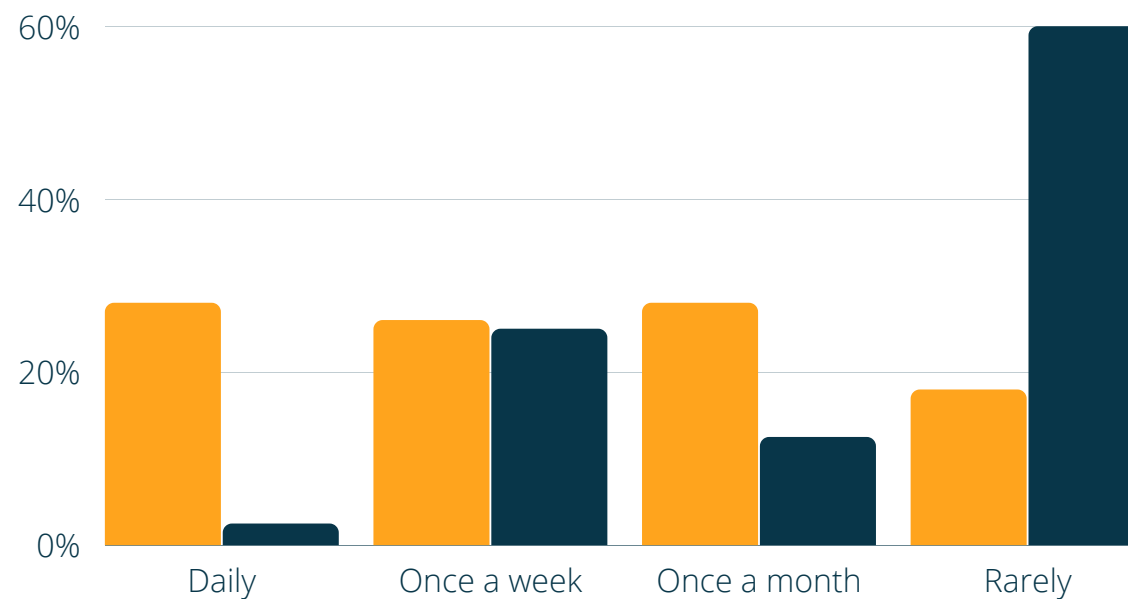## SAATHI TEACHERS ARE DEVELOPING READING CULTURE IN STUDENTS.

More than

70%

of students from Saathi classrooms read new books at least once a week.
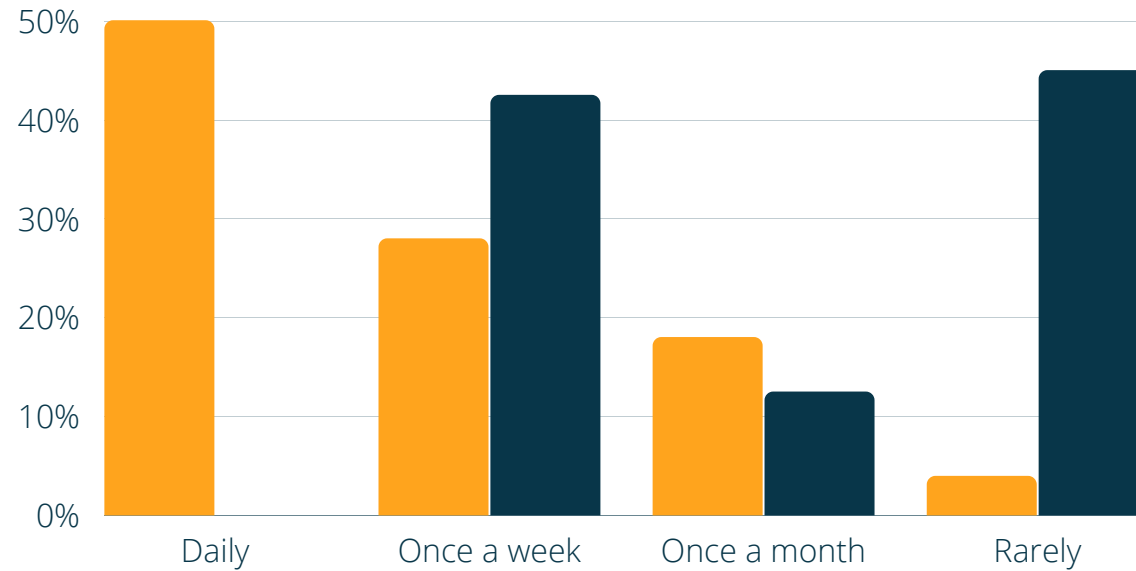
How often do you read new books to find information?

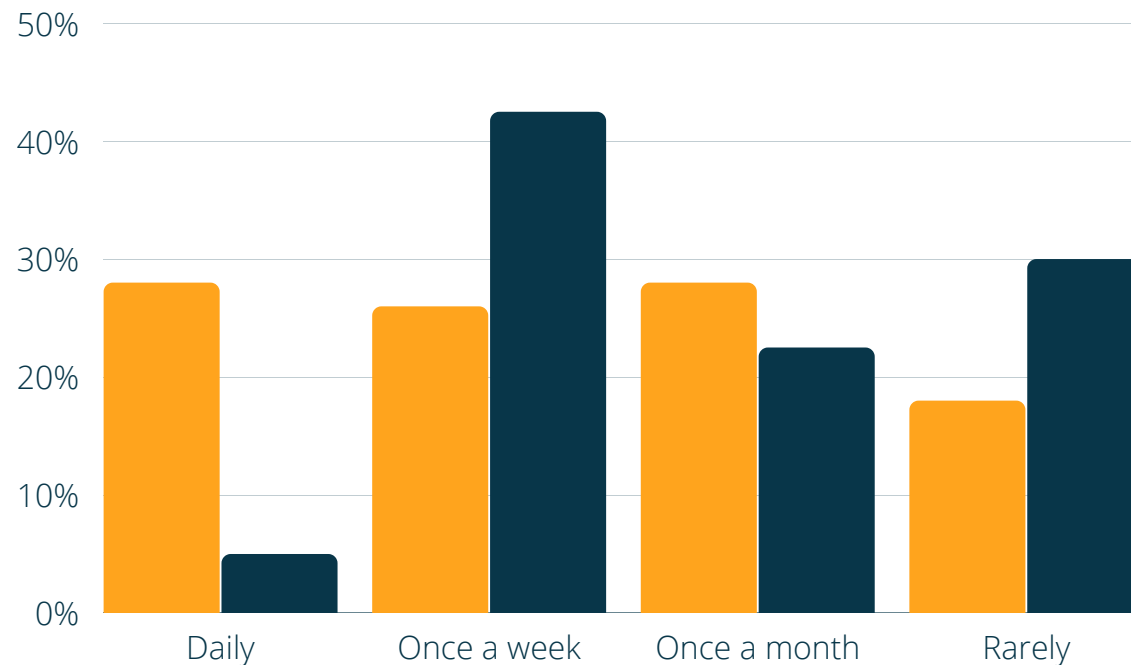**How often do you speak in front of everyone in the class?**

Non-Saathi School

Saathi School

How often do you work in group in class?

How often do you share your thoughts with friends?

Non-Saathi School

Saathi School

COLLABORATION

50%

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

Only a few students from Control school are comfortable sharing their thoughts with peer students.

30%

of students of Saathi placed school follow the Share-Pair method of learning.
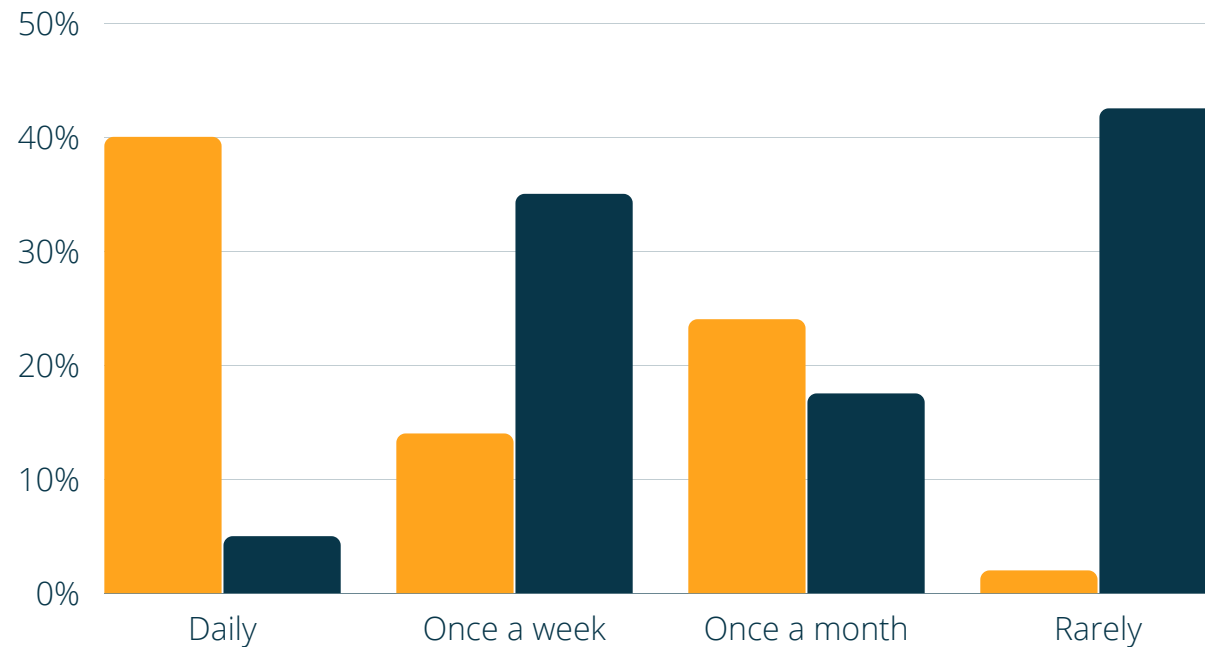
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CRITICAL THINKING

Connecting with local resources and real-life examples can help us retain the concepts for a longer period and also increases critical thinking.
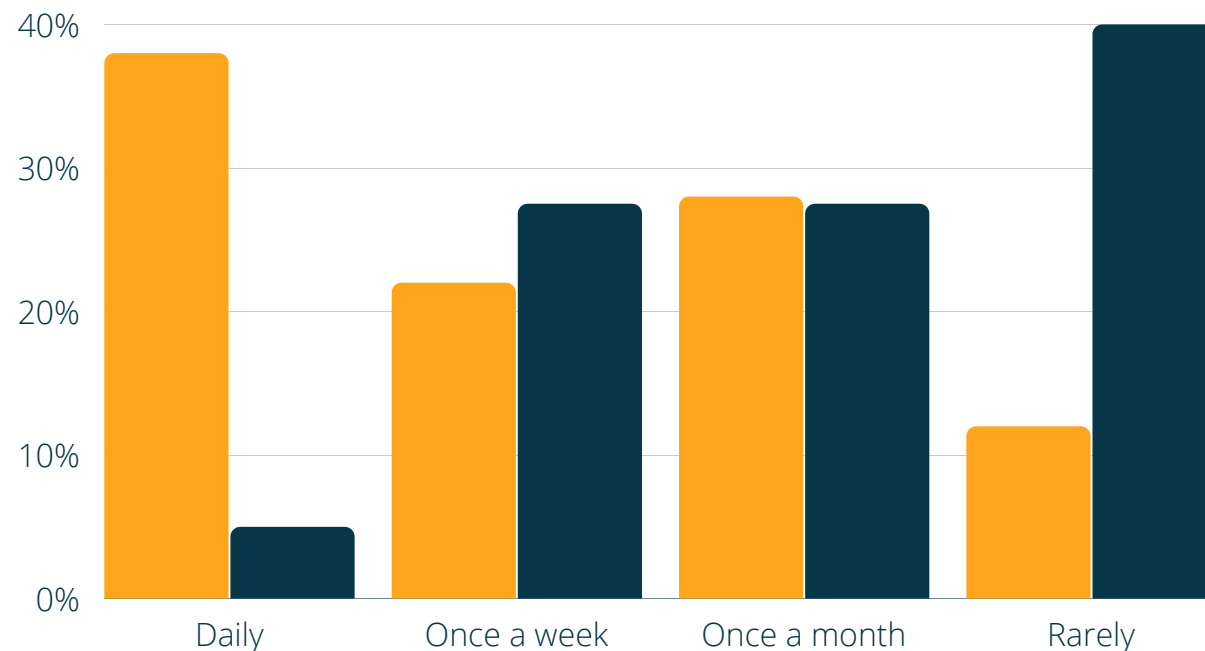
STUDENTS ARE EXPLORING AND STANDING OUT.

Crticical thinker can raise claim and questions to the teachers and villagers.

How often do you use examples of your villages in your learning?

How often do you use local resources in your studies like learning Math?

Non-Saathi School

Saathi School

How often do you learn with stories, poems and pictures?
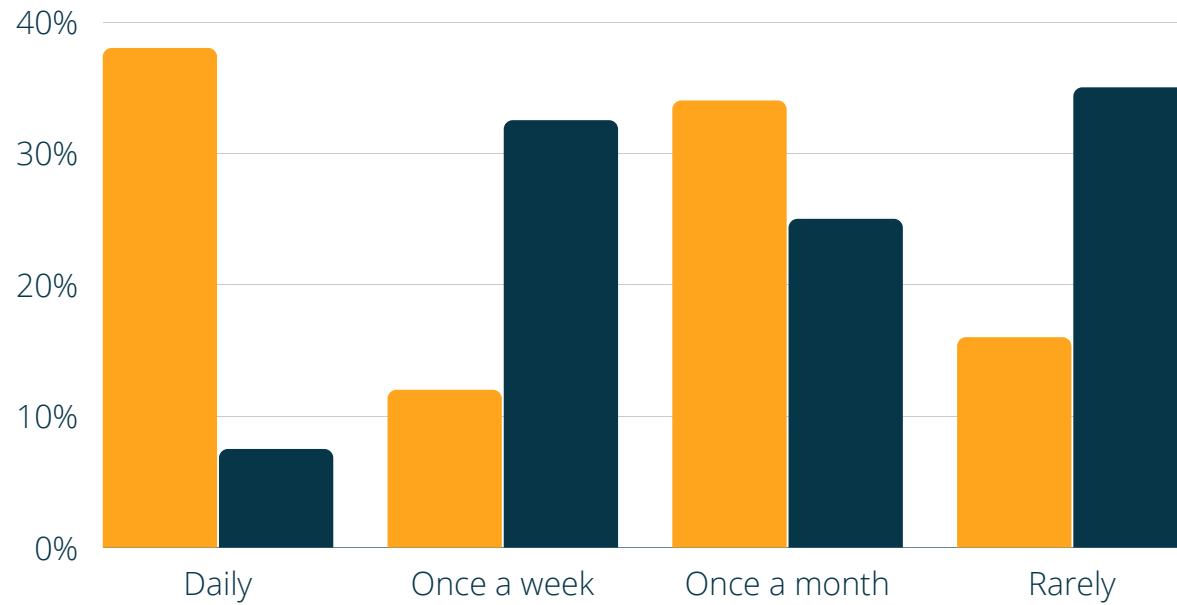
How often do you do math and science projects?

Non-Saathi School

Saathi School

CREATIVITY

Almost

40%

of students of Saathi School are using different methods of learning DAILY.

STUDENTS ARE LEARNING BY DOING

65%

of students of non-saathi school never heard about project work.

A few examples of the many testimonials we received.
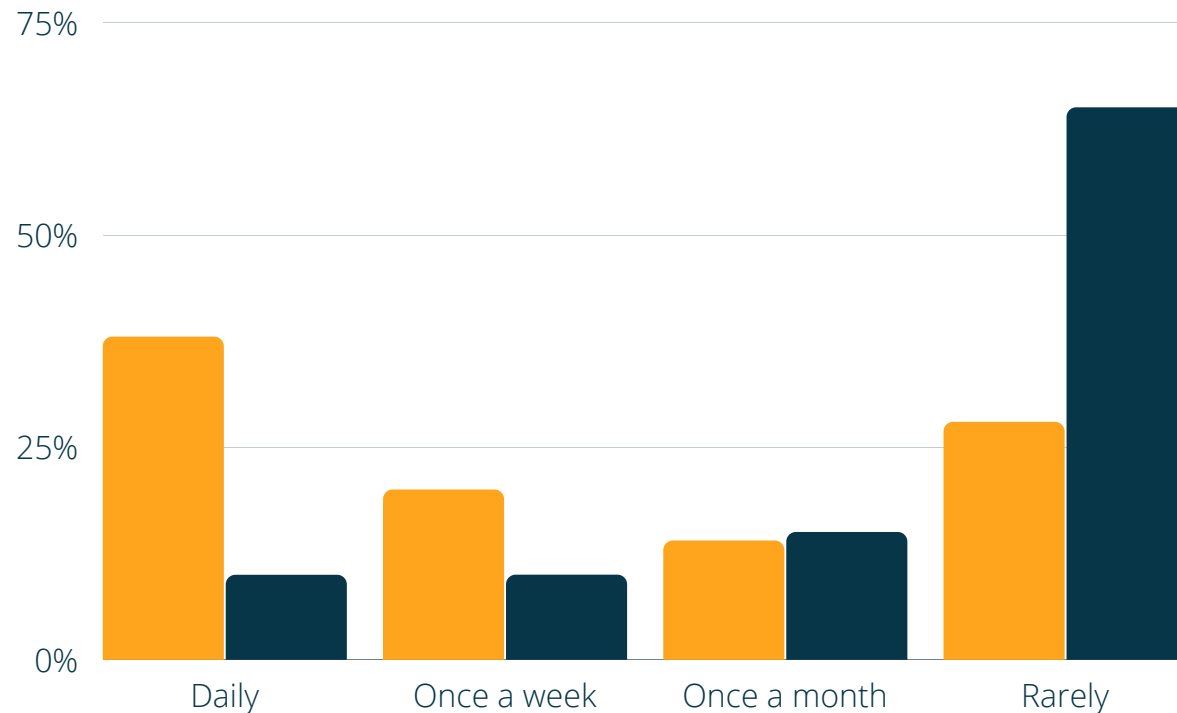
"I was petrified to come to school as I was beaten by teachers every day. After new teachers came, they never beat me and helped me catch up on what I do not know. They never scolded me in the classrooms. Now, I feel like coming to school."
Raju Lama, Grade 5, Shree Bachchalamai Secondary School

"One of my biggest achievements is that I have helped my students to remain peaceful. This is one of the best achievements of my whole life. I had always thought of making students peaceful because somewhere, I believe every good thing starts with a peaceful mind."
Nitin Shrestha, HELP Saathi Teacher 2019

"We always believed students could be managed by corporal punishment. We even suggested Saathi teachers followed the same strategies when they had put forth the idea they were going to teach in a child-friendly manner and with love. But, they proved us wrong. Now, we have learned students can be managed with love and respect too."
Mr Ram Krishna Adhikari, Principal of Golmeshwori

"While I went to one of the schools where Saathi Teachers were teaching and asked students which is their favourite subject, they told me Mathematics. I was astonished to hear that, as many find it the hardest. I later found out Saathi Teacher Sunita was teaching Mathematics in the school and the best learning achievement in this school is in mathematics."
Kamala Khanal, Education Head, Panchpokhari Rural Municipality

YOU BELIEVED IN US

SUMMARISING OVERALL IMPACT

Saathi teachers have significantly brought improvement in their classrooms as compared to the baseline data. Despite starting late in the first year and disturbance of the classroom in the second year due to COVID-19, Saathi teachers successfully worked on the language skills and numerical skills in the classrooms.

Overall, the lessons were well planned, clear objectives were fulfilled, students were highly engaged and active. While not all Saathi teachers were at the same level, the majority were teaching to a high standard and we are confident that student learning outcomes are improving as a result. Other teachers from the schools also noted the positive impact they are having – saying frequently that the children are now better behaved, happier, and attend more regularly. The Saathi teachers themselves have shared individual stories of children they have helped: particularly those suffering the most difficult family circumstances, by providing extra support for them in class and giving extra sessions before and after the school day.

Saathi teachers started with working on norms setting, building classroom and school culture, gaining trust and creating a bond with students, existing teachers, and parents, classroom and behaviour management, creating engaging lesion and group work. This helped Saathi teachers to come closer to the students and understand them better.

Another important factor supporting the Saathi Teacher programme is that the teachers who worked as Saathi teachers are now also looking forward to work in the education sector being teachers or educational leaders. This fully supports the theory of change and sustainability of the programme.

Reflecting on our
Learnings

While Saathi teachers are themselves using a lot of activities and materials in their classrooms, our focus should also be in support of other existing teachers to change their teaching style. Saathi teachers can be equipped with such skills so that they can support existing teachers also.

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

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FROM THE FIELD

Students from Taltuleshwori BS (left) and Saraswati BS (right) working in groups in the facilitation of Saathi teachers in their classrooms.

Students are learning numbers and alphabets by actively participating in fun activities and creating materials.

Student Impact Report | 2021

We recognized that teachers are the cornerstone of quality education at the foundation levels. While, there have been many tools and technologies developed to support students, the teacher remains the key player in developing children 's skills and mindset.

Stronger Support Network and System

The more we care about our teacher and support them so will the teachers replicate the same behaviours in their students. The support system for teachers will be made more effective with fast communication tools, regular reflection meetings and mentoring.

Learning with COVID

While the whole world is moving towards virtual classes, it is practically impossible for rural students to connect with such technologies. Only a handful of the students' parents have smartphones. The only effective method is cluster-based learning in small groups. We are looking for some viable methods to support students during this pandemic second wave.

Expansion of the HELP Saathi Teachers Programme

Encouraged by the success of the first cohort of Saathi, we are working to continue and expand this programme. Starting June 2021, our 20 new Saathi teachers will work across 10 primary schools in partnership with local governments.

Support us in the movement

A programme from