

MEDIUM OF INSTRUCTION: IMPROVING EARLY GRADE LEARNING OUTCOMES THROUGH USE OF MOTHER TONGUE

SANGAI SIKAUIN SANGAI BADHAUN (LEARNING & GROWING TOGETHER) PROJECT TECHNICAL BRIEF SERIES # 3

ABOUT THE PROJECT (2012-2016)

THE CHALLENGE:

In the 27 worst-performing schools in Banke and Dang, Nepal, marginalized children in former bonded labor communities had low levels of learning achievement and high dropout rates.

THE GOAL:

Demonstrate an education model in Nepal that enables marginalized children to complete a quality education up to Grade 8.

THE SOLUTION:

A multi-pronged approach to address the entire education continuum from early childhood to Grade 8 with interventions to improve teaching practice, classroom environment, governance and system support, assessment, and parent and community engagement.

THE IMPACT:

- **Learning outcomes** improved at every level from Grade 1 to Grade 10
- **Enrollment** in ECD increased to 93%
- **Attendance** increased at every level.
- **Dropout** declined from 22% to 3% for Grades 1-8

PARTNERS:

Implementing Partners: Backwards Society Education (BASE); Rural Women's Development Center (RWDC)

Technical Partners: Kathmandu University; National Center for Education Development (NCED); Rato Bangala Foundation; Seto Gurans National Child Development Center



The results of the Sangai Sikaun Sanagi Badhaun (Learning & Growing Together) Project confirm that mother tongue instruction enhances learning. This brief outlines key strategies and lessons learned related to medium of instruction for marginalized groups.

A recent United States Agency for International Development (USAID) nationwide Early Grade Reading Assessment (EGRA) found that 37% of Grade 2 students and 19% of Grade 3 students in Nepal could not read a single word.¹ In the project area, a separate baseline assessment modeled on the EGRA found that 68% of Grade 2 students and 40% of Grade 3 students could not read a single word in Nepali, the primary language of schooling.

Why aren't children learning to read?

One likely cause is that roughly 55% of the population of Nepal speaks a language other than Nepali as a first language.² In the project communities in Banke and Dang districts, roughly 70% of children speak Tharu as their first language. Research shows that children learn best when they learn in their mother tongue first. In Nepal, efforts to provide quality education to all students will be severely hamstrung unless these efforts include support for minority language speakers through mother-tongue based instruction in the early grades with opportunities to transition to Nepali and/or English after literacy skills are developed in the mother tongue.

KEY STRATEGIES

Before the project, many schools were not even teaching in Nepali (which uses the same script as Tharu and is in the same language family), but rather in English. Parents placed a premium on English skills, and schools had begun to promote English as the medium of instruction in order to compete for students with local private schools. Teachers, however, did not have the strong English skills necessary. The results showed at exam time. As for Nepali learning, teachers complained that children would learn letters and words but forget them after two or three months, likely a result of over-reliance on rote memorization.

Unsurprisingly, overall learning achievement in the project area was low, attendance was poor, and dropout rates for Grades 1-8 were 23%, well above national and regional rates of 5-6%.

While the project initially focused on quality education more broadly, baseline results indicated a need to home in on the local Tharu language as a means to achieving the goal of quality education. As the project evolved, using children’s mother tongue as the initial Medium of Instruction with strong transitional support to multi-lingual education increasingly became a cornerstone strategy.

EVIDENCE-BASED ADVOCACY TO GENERATE COMMUNITY AND PARENT SUPPORT

Previous efforts to convince parents to enroll children in schools with minority languages as the medium of instruction have had little success, perhaps in part because many used the mother tongue exclusively. Instead of promoting the exclusive use of students’ first language (mother tongue), the project accepted the reality that parents wanted their children to master Nepali and English and advocated for a progressive approach to enable students to develop literacy in all three languages.

Given that many parents were initially skeptical of the need for mother-tongue based instruction, generating community support for the strategy was a critical first step. The project communicated key messages to parents through a combination of mass media, small groups, and one-on-one meetings with parents.

“I always used to think my children had to learn in English. Now I understand the value of mother tongue instruction. I will share this message with other parents.”

Key activities included:

- » **Generate buy-in** from regional and district-level stakeholders and community leaders through agenda-sharing meetings.
- » **Raise awareness of the importance of mother-tongue based instruction through media campaigns**, including billboards and radio ads.
- » **Increase visibility of use of Tharu** by using it in Early Childhood Development classes.
- » **Educate parents** through classes that covered the importance of mother tongue-based learning, among other topics.
- » **Include mother tongue in Opportunity to Learn frameworks for planning and School Improvement Plans (SIP).**
- » **Share results of learning assessment with parents.**

Parents were particularly motivated by evidence. Explaining how and why mother tongue instruction contributes to overall learning was important. Furthermore, parents appreciated evidence of children’s progress, including assessment results and tracking against benchmarks created for leveled readers. Many parents became convinced when they could empathize with their children: a turning point for many was when meeting facilitators switched between Nepali and Tharu languages so that parents could experience the challenge and reflect on their children’s needs.

BUILD SUPPORTIVE SYSTEMS

World Education worked simultaneously to build capacity of

Progressive Mother Tongue-Based Multi-Lingual Approach			
Level	Use of Tharu	Use of Nepali	Use of English
ECD	Exclusive	None	None
Grade 1	Medium of instruction	Introduction to oral language	None
	Medium of instruction	Increased focus on vocabulary development; beginning literacy	Introduction to oral language
Grade 3	Transition out of medium of instruction; use for clarifying explanations	Transition into medium of instruction	Continued introduction to oral language

¹ Sitabkhan, Y. and DeStefano, J., (2014). Education Data for Decision Making (EdData II): Nepal Early Grade Reading Assessment (EGRA) Study. Washington, D.C.: USAID.

² Nepal Central Bureau of Statistics, 2011.

KEY STRATEGIES

teachers and the systems supporting them: Resource Persons, principals, School Management Committees (SMC), government trainers, Parent-Teacher Associations (PTA), the Village Education Committee and local government.

Key activities included:

- » **Train government Resource Persons** on mother tongue instruction to enable them to provide on-site coaching to teachers.
- » **Train principals and School Management Committees (SMCs)** on the importance of mother tongue instruction.
- » **Advocate for redeployment or hiring of local Tharu-speaking teachers for early grades.**
- » **Build capacity of government Education Training Center, Resource Teachers and District Education Office** to support mother tongue instruction, enable broader adoption, and ensure sustainability.

TEACHER TRAINING & ON-SITE SUPPORT TO ENCOURAGE MOTHER TONGUE USE

Initially, teachers felt more comfortable teaching in Nepali, in part because all government textbooks are in Nepali (or English). In order to motivate teachers to adopt a new approach, the project provided support in a variety of ways:

- » **Train ECD facilitators and early grade teachers to use Tharu** as the medium of instruction in all subjects, using a progressive approach depending on level.
- » **Tharu-speaking mentors from the community visit teachers** in their classrooms regularly to promote and encourage the use of Tharu as a medium of instruction.
- » **Promote a sharing culture:** In Learning Circles teachers discussed and shared experiences, challenges, and successes related to use of children's first language as the Medium of Instruction. Teachers were also given space in public fora, media coverage, and in a regional conference to share their experiences and results from using Tharu as the medium of Instruction.

PROVIDE TEACHING LEARNING MATERIALS IN MOTHER TONGUE

To facilitate use of Tharu in the classroom the project developed teaching and learning materials in Tharu, and also provided supplementary materials in Nepali with the Read-Learn and Know Nepali language package previously developed by World Education. Initially, the expectation was that simple supplementary reading materials would be sufficient, but later experience showed a more comprehensive package of materials was needed. The government textbooks were in Nepali and were used for learning letters and sounds, while the project's Tharu materials, which were closely aligned with the textbooks, were used

for teaching and learning reading skills.

Key activities included:

- » **Developed scope and sequence for Tharu** linked to curriculum and language structure.
- » **Five-day writers workshop** engaging parents, teachers, Tharu community leaders and senior students and artists. The workshop produced reading cards in single color by grade using local stories and images.
- » A second five-day workshop **revised the scope and sequence** based on experience and created new decodables and leveled readers.
- » **Provide support to parents and teachers to develop their own Tharu language teaching-learning materials.** Having high quality materials in the Tharu language that parents, teachers and community leaders had helped produce resulted in great pride in the materials and support for their use. Children were immediately drawn to these materials over books in Nepali and English as they could relate better to the stories and make more sense of the content.



SUPPLEMENTARY TEACHING-LEARNING MATERIALS PACKAGE

THARU TEACHING LEARNING MATERIALS

- » 46 Picture Word Cards
- » 142 Word Cards
- » 61 Decodable Leveled Reading Cards
- » 18 Leaflet Stories
- » 4 Story Books
- » 7 Big Books

WORLD EDUCATION READ-LEARN-KNOW EGR NEPALI PACKAGE (SUPPLEMENTARY)

- » 20 charts to introduce phonemic sounds, letters, syllables, letter combinations, simple words and rhymes
- » 40 picture cards and 2 child flex charts for vocabulary building
- » 48 alphabet dice, 38 foam letter shapes and 3 Magic Letter balls to build familiarity with letters
- » 414 games cards
- » 56 leveled readers
- » 93 decodable leveled reading cards
- » 1 Teacher Activity Book and EGR Overview Chart
- » Continuous Assessment Record Book, EGR Assessment Book and Milestones Chart
- » Crown, stamp, Reading Certificates, and memo for parents

RESULTS

While the project’s multifaceted approach included a variety of interventions the data suggest a strong impact as a result of the medium of instruction component.

INCREASED NEPALI READING ACHIEVEMENT EACH OF GRADES 1-3

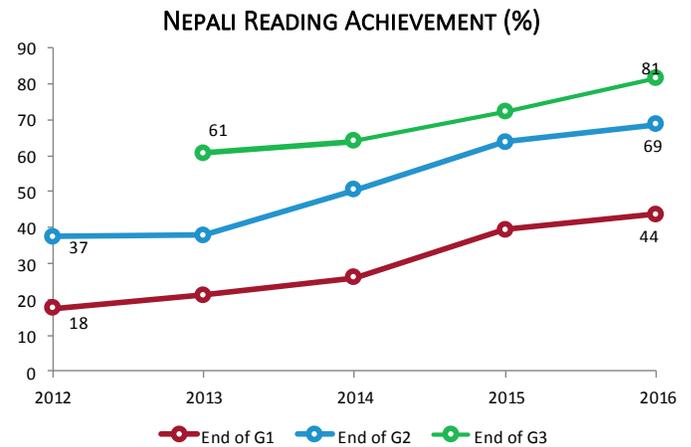
The annual World Education Learning Assessments (WELA) showed that Nepali reading achievement increased significantly between 2012 and 2016. The assessment, based in part on the EGRA, tested nine areas of reading skills: including listening comprehension, letter recognition for consonants and vowels, simple word, vowel sound (*matra*), joint word, word meaning, paragraph reading, and reading comprehension. The questions for each of these variables are based on the Grade 1 national curriculum. Reading achievement refers to the percent correct out of 135 possible points across nine competency areas.

In the first three years of the project, schools in neighboring communities served as a control group. During this time, intervention schools demonstrated marked score increases compared with control schools, with the overall gap between the two groups increasing each year.

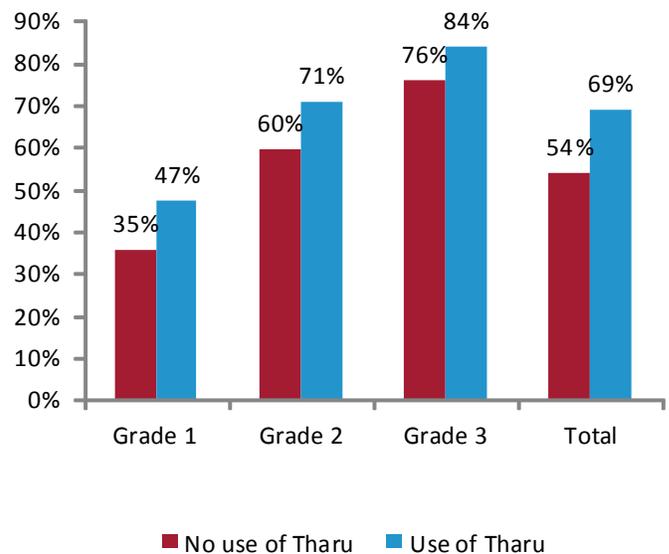
HIGHER NEPALI AND MATH SCORES CORRELATED TO USE OF MOTHER TONGUE

Use of Tharu language in the classroom was measured in the WELA in the final two years of the project. Analysis of the WELA results for both early grade (Nepali) reading achievement and early grade math reveal consistently higher scores amongst students whose teachers used Tharu language in the classroom compared to students whose teachers did not. The positive correlation was statistically significant in both learning areas. This suggests, as other research has also suggested, that mother tongue support is important for *all* learning.

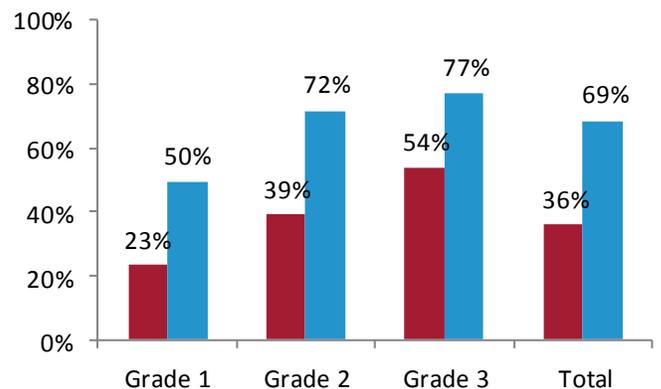
Below: Tharu materials development workshop



NEPALI READING ACHIEVEMENT (%) BY USE OF THARU



MATHEMATICS ACHIEVEMENT (%) BY USE OF THARU



RESULTS

LITERACY DEVELOPED IN BOTH LANGUAGES

Students' ability to read in Nepali improved significantly over the course of the project, and higher scores were correlated to teachers' use of Tharu materials. However, use of Tharu as the medium of instruction and supplementary materials were not simply a means to achieving literacy in Nepali, but also helped students develop literacy skills in their mother tongue, Tharu.

While Tharu reading skills were not measured at baseline, we can assume that most students had limited, if any, ability to read in their mother tongue because Tharu was not taught in schools. There were also no Tharu reading materials available. The Tharu reading assessment was piloted in Year 4 with a small sample of students and given to all Tharu-speaking students in Year 5 (1,018 students) alongside the Nepali assessment. Looking into total scores in Nepali and Tharu language, there are statistically significant, albeit modestly, higher scores in the Tharu assessment. The students secured 1.1% higher score in the Tharu test in total.

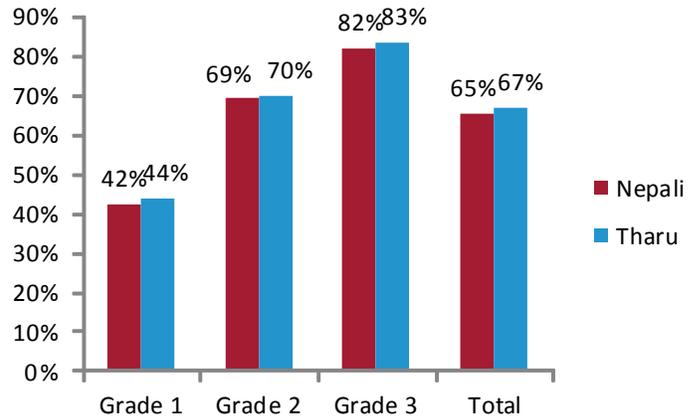
While Tharu-speaking students earned higher scores in Tharu reading than Nepali reading, the differences are small. These results confirm conclusions made by other researchers that reading skills are transferrable from one language to another. Given that Nepali reading scores improved dramatically over the course of the project, the results also provide evidence to assuage parents' fears that mother tongue learning might hamper learning the national language. Rather, students were able to develop nearly equivalent skills in Nepali and Tharu, with achievement in both outpacing baseline and control scores for Nepali.

THARU-SPEAKING STUDENTS ARE STILL AT A DISADVANTAGE IN NEPALI

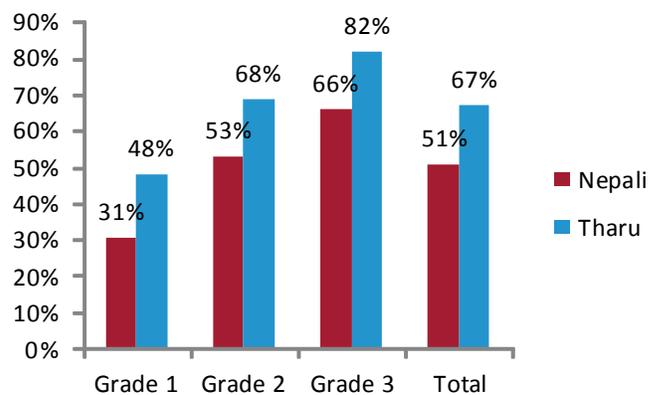
While Tharu-speaking students showed only a small difference in overall Reading Achievement scores between their mother tongue and Nepali, there was a much larger difference in listening comprehension between the assessments conducted in Nepali and Tharu language for Tharu students. The students scored 16 percentage points higher in the Tharu test for listening comprehension compared with the test administered in Nepali. The difference is statistically significant and also relatively consistent across all three grades.

While Tharu-speaking students performed nearly as well in Nepali as in Tharu in overall Reading Achievement (which includes the listening sub-task), their substantially lower Nepali listening comprehension scores make clear that these students are still disadvantaged when it comes to understanding—or learning from instruction in—the Nepali language.

NEPALI AND THARU READING ACHIEVEMENT (%)



LISTENING COMPREHENSION (%) IN THARU VS. NEPALI OF THARU-SPEAKING STUDENTS



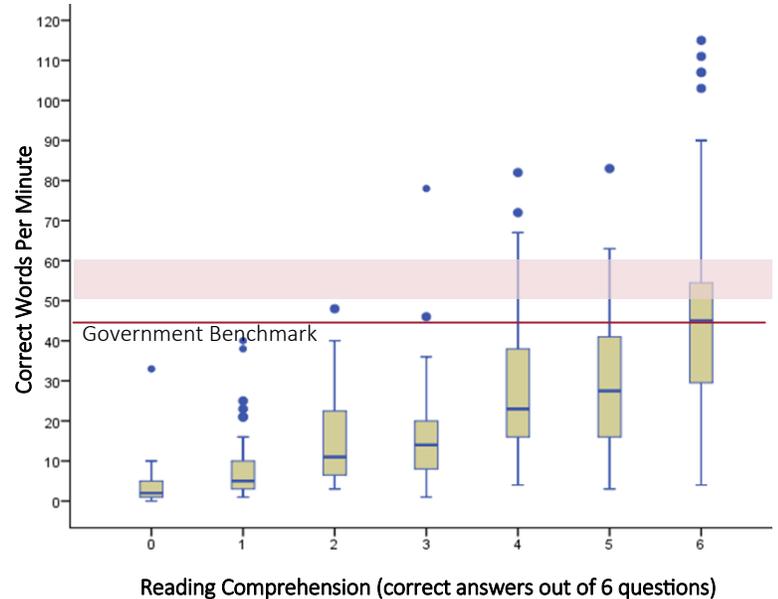
RESULTS

FULL COMPREHENSION REACHED AT SLOWER SPEED COMPARED TO RECOMMENDATIONS

Researchers have suggested 50-60 correct words per minute as a rough threshold necessary for full (80% or above) comprehension, and that this threshold remains relatively stable across languages.³ In Nepal and Nepali, specifically, the national EGRA report found that in order to understand text, “students had to be reading above 30 or 35 CWPM, with most students who achieved at least 80% comprehension reading around 60 words per minute (in Grade 3) and 55 words per minute (in Grade 2).”⁴

However, national and international standards do not account for second language learners. The project’s metrics for CWPM come from a primarily Tharu-speaking student population being assessed in Nepali reading ability. In contrast to the literature on fluency (which presumably focuses on first language literacy learning) and the national benchmark, these students seem to be achieving 80% correct comprehension (5 or 6 correct questions) at lower speeds. For example, most grade 2 students who achieved 80% comprehension read at speeds of roughly 15-55 CWPM. Some difference may be due to slightly different assessment tools and methodologies, but this preliminary data could indicate an area for further research.

FLUENCY AND COMPREHENSION OF GRADE 2 STUDENTS



LESSONS LEARNED AND WAY FORWARD

Mother tongue instruction supports literacy development in both national language and mother tongue as well as numeracy.

Project interventions successfully elevated Nepali reading scores in three predominantly Tharu-speaking VDCs. Use of Tharu by teachers as the major Medium of Instruction in early grades correlated to higher learning achievement in both (Nepali) reading and math. Furthermore, for the years when control data is available, intervention schools outperformed control schools on (Nepali) reading achievement. These results suggest that in communities with both low levels of reading achievement and high numbers of students who speak a mother tongue other than Nepali, policy-makers and program designers should consider the role of mother tongue-based multi-lingual education as a means to improve learning, not just in the local language, but in Nepali reading and all subjects.

Teachers, parents, and stakeholders need a clear language transition policy.

Parents and community stakeholders require clarity about the role of mother tongue instruction in building the foundation for literacy in Nepali and English later. A clear transition policy was critical for convincing parents of the value of mother tongue. Similarly, teachers require specific guidance about how and when to use mother tongue, and then how and when to introduce second and third languages in the classroom in order to adopt the new strategy effectively.

³ Cf. Abadzi 2008, 2013; RTI, 2010, 2011.

⁴ Sitabkhan, Y. and DeStefano, J., (2014). *Education Data for Decision Making (EdData II): Nepal Early Grade Reading Assessment (EGRA) Study*. Washington, D.C.: USAID. p.5.

LESSONS LEARNED AND WAY FORWARD

Community support is critical to enable mother tongue instruction.

World Education’s experience over the past five years provides valuable lessons about the role of community in supporting mother tongue instruction. Both in Nepal and elsewhere, many parents are initially hesitant about the idea of mother tongue instruction because they are concerned about the ability of their children to participate in a society (national or global) where a different language dominates. The project successfully secured buy-in for mother tongue instruction, especially by sharing assessment data with parents so that they could understand the very real impact of the strategy on their children’s learning. Engaging parents in the creation of mother tongue materials also proved to be an important way to increase parental ownership of local mother tongue teaching and learning. Thus, the experience and impacts from the project suggest that a combination of awareness raising, results sharing, and participatory strategies can successfully make parents not only accepting of mother tongue instruction, but fully supportive and enthusiastic about it.

Quality materials with embedded good best practice can support behavior change.

Teachers initially found it difficult to use Tharu as the medium of instruction and support children’s development of literacy skills in their mother tongue as there were no materials and little support from parents. Developing materials—especially through participatory processes and workshops for parents—and providing these materials to teachers proved to be a key success factor. Many materials inherently pushed teachers to use good practice. For example cards that show how a matra (vowel sound) applies to different consonants encouraged teachers to focus on particular components. Teachers were excited to use the new materials, and their availability made it much easier for teachers to implement new skills. To be useful and appealing, though, local language materials must be of equal or higher quality compared to Nepali and English language materials.

Beneficial policies require support for implementation to benefit minority language students.

The Government of Nepal’s teacher hiring policy provides for teachers who speak the local language in Grades 1 to 3. Unfortunately this policy criterion is often given low priority during teacher selection. After realizing the value of mother tongue medium of instruction, schools were able to respond by re-deploying teachers from higher grades to early grades and paid greater attention when hiring new teachers so that new teachers were fluent in the local language.

National benchmarks should be considered with care in relation to second language learners.

Students in project schools showed dramatic gains in both reading and numeracy outcomes. Despite these gains, their learning achievements at the conclusion of five years of support remain far below the Government of Nepal’s stipulated outcomes. For example, the national curriculum requires students to learn 1,000 Nepali words in Grade 1—the equivalent of 5 new words each day in a second language for these students. Teachers find these targets aspirational and unachievable and are unable to determine realistic expectations. Similarly, the results for comprehension and fluency (CWPM) suggest that these students were able to reach full comprehension at slower reading speeds compared to broader samples. Further nuance is needed to account for different learning timeframes for minority language speakers, especially given that they make up roughly half of Nepal’s student population.

CASE STUDY



Motisara Khatri is a Grade 2 teacher at Shree Janjagriti Lower Secondary School in Baijapur VDC, Banke District, where 86% of the students are Tharu. When she first started teaching, she struggled to help her students learn. She had not received any training, and she focused only on following the progression in the textbooks, which were the only written materials to which students were exposed. Other than textbooks, students had only their exercise books to read, which contained text copied from the blackboard. Motisara could speak Tharu, but she did not use the language in the classroom, as she figured students needed to learn Nepali and English more.

In 2012, Grade 2 students at Motisara's school scored an average of 74.9% for reading achievement on the WELA—significantly higher than most schools in Baijapur, but a result that still showed some room for improvement.

Through World Education's interventions, implemented in partnership with the local Tharu NGO BASE, Motisara attended a five-day intensive Early Grade Reading (EGR) training followed by refresher trainings and orientations on the use of mother tongue as medium of instruction. In particular, things "clicked" for Motisara when she was able to observe a model lesson that covered the five skills of reading. She realized that, especially for vocabulary development, mother tongue instruction is key to helping students advance their reading skills.

Motisara returned to her classroom where she benefitted from Tharu-language materials such as letter cards, word cards, levelled readers, and big books provided by World Education. She also received ongoing support from her local government Resource Person as well as project staff who observed lessons and gave her immediate and actionable feedback to improve instruction. Motisara found that by using students' mother tongue, she was able to increase the level of interaction between herself and the students. Students became less shy and more enthusiastic about participating actively in class and sharing their ideas out loud.

In 2016, four years after Shree Janjagriti's Grade 2 students averaged 74.9% in Nepali Reading Achievement, Motisara's students earned an average score of 97.1%—nearly perfect marks and 22 percentage points higher than the earlier assessment.

“Parents and the community used to ask me to teach their children English and I was also focusing on it. But after training, I realized that the students can learn better with comprehension when they get the opportunity to learn in their own language.”

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Summary Brief

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