EARLY GRADE READING:
ACHIEVING SUCCESS IN DISADVANTAGED MINORITY LANGUAGE COMMUNITIES IN NEPAL

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 Sangai Sikaun Sangai Badhaun (Learning & Growing Together) Project brought together teachers, parents, students and literacy coaches to change the way reading is taught. Students made major gains in reading skills that have helped them across all subjects.

At the start of the project in 2012, learning achievement was very low in the catchment area. Average school marks were 43% for both primary and secondary students, well under the government’s 60% minimum standard. Similarly, the project’s own assessment found low levels of reading achievement at baseline. In 2012, 68% of Grade 2 students and 40% of Grade 3 students could not read a single word. On average, Grade 2 students could read just 3 correct words per minute (CWPM) on average, while Grade 3 students averaged only 8.

Not a single school had supplementary reading materials for early grade learning. Many schools were overcrowded; the average class had 40 students, and some had more than 90 students. Students were accustomed to chanting and memorization, and teachers rarely employed different teaching methods. Government Resource Persons assigned to support teachers and schools were overwhelmed and could hardly allocate time for providing technical support. Teacher training centers also needed capacity building to incorporate new skills and methods.
KEY STRATEGIES

To meet the project’s broad goal of developing a model for quality education from ECD through Grade 8, World Education took a holistic approach to address the multifaceted challenges facing the project communities. The project’s theory of change with regard to Early Grade Reading was that to improve reading achievement, students need to start learning through quality pre-primary education, use mother tongue as a transitional language, learn from teachers with strong skills, have access to quality materials in the classroom, and benefit from strong parental engagement and community support.

INTEGRATE PRE-LITERACY AND PRE-NUMERACY IN EARLY CHILDHOOD DEVELOPMENT

In order for early grade reading interventions to have maximum impact, students must be ready to learn and have a strong foundation of pre-literacy skills when they enter primary school. While working on early grade learning, the project simultaneously worked to strengthen this foundation through early childhood development (ECD) initiatives in the communities. ²

Key activities included:
» Mobilization of government and community.
» Training and mentoring for ECD facilitators.
» Provision of pre-literacy and pre-numeracy teaching-learning materials as well as supplies for facilitators to create new materials.
» Parent and community engagement and accountability initiatives.

ENABLE MOTHER TONGUE INSTRUCTION

After the baseline data uncovered the factors behind low learning achievement, mother tongue literacy development evolved into a core strategy to improve reading achievement, even in Nepali. ³

Key activities included:
» Advocacy with teachers and parents to convince them of the effectiveness and value of starting children’s education in their mother tongue.
» Development of Tharu language reading materials.
» Skill-building for teachers to use mother tongue and transitional approaches into Nepali as a second language.
» Capacity building of systems to support mother tongue medium of instruction.

STRENGTHEN TEACHER CAPACITY

In each of the 27 project schools’ classrooms, regular training and coaching were provided on effective teaching and learning methods with particular focus on early grade reading.

Key activities included:
» Provide progressive professional development: Training sessions started with foundation topics such as child friendly teaching and advanced to progressively more in-depth and technical topics—such as how to teach each component of reading—and assess progress over the five years of the project, allowing teachers to really build skills.
» Coach and mentor teachers: All teachers were also provided with on-site mentoring. Outside of organized training sessions in teachers’ natural environment of the classroom and school, teachers received regular coaching and mentoring from government Resource Persons (RPs) and project staff.
» Create a sharing environment: The project included interventions to help teachers share and learn more on their own. In monthly “Learning Circles”, early grade teachers shared classroom activities and processes, practices of using materials, challenges they faced, and progress made. Technical support was provided at each meeting by local government Resource Persons and the project’s literacy

2 For more detail on early childhood development, refer to Technical Brief #1 in this series.
3 For more detail on mother tongue instruction, refer to Technical Brief #3 in this series.
coach. Participating schools rotated hosting duties, which allowed teachers to observe other schools and learn from peers’ observations. World Education supported the creation of guidelines for the Learning Circles in collaboration with the District Education Office.

» **Build stronger support systems:** Resource Persons and school administrators participated in separate training to build their capacity to support the teachers.

**Create Materials-Rich Learning Environments**

At the start of the project, not a single school had supplementary materials for early grade learning. Thus, a key project strategy was developing and providing materials in both Nepali and the local Tharu language. In addition, the project established a library staffed by a trained teacher and older students at each school.

Key activities included:

» **Provide supplemental materials in Nepali:** Materials provided by the project included letter cards, decodable readers, levelled readers, big books, letter and number dice, sponge letters, and picture cards.

» **Develop mother tongue (Tharu) teaching learning materials:** High quality EGR materials were created in Tharu language to facilitate mother tongue instruction.

» **Establish and stock libraries:** Each school established a library, and older students and teachers participated in training to manage the libraries effectively.

**Mobilize Parent and Community Support**

Adults in the project community had low levels of literacy and minimal experience, if any, with formal schooling themselves. Given this context, stimulating parent and community support for education was a core strategy to address factors outside the classroom.

Key activities included:

» **Classroom visits and meetings engaged mothers and fathers** to understand what their children were learning and how they can support learning.

» **Organize large reading fairs:** Fairs made reading a fun community experience through games and activities related to reading and learning.

» **Empower mothers:** Illiterate mothers were supported to participate in adult literacy classes in Tharu language and then economic education and microfinance initiatives.

» **Home support:** Mothers of struggling students were brought together regularly to discuss how they could support their child to develop vocabulary and reading skills.

Parents showed great interest in being involved in the learning activities and began to visit the classrooms and school more frequently.

**Motivate Change with Evidence-Based Dialogue**

Using data as the foundation for conversations with key stakeholders was critical to the success of the project. World Education’s experience suggests that assessment data can be a key tool to motivate behavior change.

Key activities included:

» **Build school management capacity to conduct school self-assessments using an “Opportunity to Learn” framework.**

» **Conduct learning assessments and share results with parents, teachers, SMCs, PTAs, and local government.**

» **Train and encourage teachers to use a Continuous Assessment System (CAS) to track students’ progress.**

» **Promote sharing between teachers and parents that celebrates student progress.**

World Education designed and conducted its own WELA learning assessment (similar to EGRA and EGMA) to track changes in learning outcomes. In the first two years, the assessment was conducted in the children’s homes. An important consideration for evidence-based dialogue with parents is ensuring that parents do not blame or punish children for poor achievement, nor decide that sending their children to school is a futile endeavor. Enumerators conducting the assessment were specifically trained to first brief parents on the detrimental effects of punishment on learning and the role of parents and teachers in helping children to learn.

In addition to WELA data, continuous assessment performed by

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4 For more detail on parent and community engagement, refer to Technical Brief #4 in this series.

5 For more detail on Opportunity to Learn, refer to Technical Brief #4 in this series.
teachers was also a key source of data to promote dialogue. Teachers were able to quickly categorize students by reading ability and identify areas students struggled with. Achieving this level of knowledge on students’ current learning was a major step forward in a context where rote memorization had been the standard method of teaching. Continuous assessment helped not only teachers, but also parents. Using charts in the classroom to track progress against a series of milestones and certificates for children to take home, teachers, parents, and students themselves could track reading progress. The milestones were connected to the materials supplied by the project which made it easy for teachers to track student progress.

Communities were helped to establish community-based “Learning Centers” to support students from the poorest and most disadvantaged families. These are led by senior students who facilitate and help younger struggling students with homework and lead other learning activities. The senior student gets a small stipend to help meet their own educational costs. These Learning Centers are now being replicated across the country as “Homework Clubs” however financial sustainability is a challenge in the poorest communities.

In each of the 27 project schools’ classrooms, regular training and coaching were provided on effective teaching and learning methods with particular focus on early grade reading.

### Key Strategies

**Target Weakest Students for Extra Support**

The annual World Education Learning Assessments 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: 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 all areas.

In fact, by the end of the project, the average Grade 1 student could read better than the average Grade 2 student had been able to at the start. Similarly, Grade 2 students at endline outperformed the baseline’s Grade 3 students.

Data also showed that reading achievement improved for children of all ethnicities and both genders.

While the project stressed use of mother tongue, it is worth noting that the WELA assessment’s primary tool measured Nepali reading skills, due to the need for comparable data and a measure of the reading skill necessary for success in higher grades.

### Results

**Increased Reading Achievement in Grades 1-3**

In each of the 27 project schools’ classrooms, regular training and coaching were provided on effective teaching and learning methods with particular focus on early grade reading.

### Improvement in Reading Achievement over Time

![Improvement in Reading Achievement over Time](chart.png)
RESULTS

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. In the graph below, Cohort 1 (learners who started grade one in 2012) has shown the most significant improvement since these children have benefited from the start of their first reading experience. At the end of the second assessment, the intervention schools had achieved 42% higher reading scores than the control schools. Moreover, the overall gap between the two groups increased incrementally each year.

**Reading Achievement: Project compared to control**

According to the Fidelity of Implementation (FOI) study on the project’s impacts, 92% of teachers reported using supplementary materials (not just Tharu materials), and classroom observations found that 76% of teachers had materials for the prepared lesson. 77% of teachers are regularly participating in sharing meetings. The Fidelity of Implementation assessment found a very high and significant correlation (r =0.45) between total WELA scores (WELA 5 in 2016) and the FOI scores for the early grade reading component of the project. When teachers use early grade reading methodologies and materials well major gains can be achieved even in disadvantaged communities where local language is an added challenge.

“\nThis five days of EGR training is very important for us. I realized that I was teaching the students in the wrong way. Today, I understand the steps of reading and the 5 major components of reading, and I request all teachers and head teachers to follow the steps.\n- Nar Bahadur Oli, Head Teacher, PS Bankatta Manpur\n”

**Improved Pedagogy and Teacher Behavior**

**Strengthened System Capacity**

In order to ensure sustainability, World Education built the capacity not only of teachers but also of the systems and structures that support teachers and will continue their professional development in the future. Evidence also suggests positive behavior change on the part of principals, RPs, and local government officials: records show that RPs have been visiting schools more regularly, and teachers’ feedback indicates they feel more supported. The RPs have been including the approaches they have been developing as part of the project with other schools within their cluster through training and technical visits.

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6 The project evaluation design initially included 18 control schools in similar, adjoining communities. However, after 3 years of implementation, spillover effects and the demands from the schools for support rendered the schools no longer useful as a control group.
RESULTS

Fluency Gains Show Significant Achievement, but Room to Improve

Reading fluency, as measured in correct words per minute (CWPM), is a popular proxy for overall reading ability in early grade students because students must be able to read at a reasonable pace in order to achieve satisfactory comprehension and because it can easily be compared across populations and languages.

A comparison of reading speed between students in the project area and the national baseline EGRA study conducted in 2014 shows that students in the project area read at similar (Grade 2) or slower speeds (Grade 3) early in the project. By the end of the project in 2016, students in the project area were reading at significantly higher speeds compared to the national EGRA for both Grade 2 (10 more words per minute) and Grade 3 (11 more words per minute).

However, the benchmark suggested by Nepal’s Ministry of Education remains out of reach for the average student. Students in the project area have made significant gains, but their low starting point and the severe disadvantage of their context means they still have far to go.

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. 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).”

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

9 Sitabkhan & DeStefano, 2014, p. 5.
A holistic model for Early Grade Reading is effective.

For marginalized children in contexts where the entire schooling ecosystem struggles to provide a quality education, a holistic and multi-faceted approach is necessary to address the multiple barriers that hinder learning. These include lack of materials, mother tongue issues, teacher quality, school governance challenges, and lack of parent engagement.

Initial use of mother tongue supports reading achievement.

The project results align with other research that indicates children learn to read best when they learn in their mother tongue first. Teachers’ use of the children’s native Tharu language correlated to higher levels of reading achievement in Nepali.

Coaching and on-site support promote application of training curriculum, and should be integrated into the system.

On-site support from both coaches and school management is critical to allow teachers the opportunity for continual learning and practice of the skills needed to improve student achievement. While teachers may leave a training feeling that they have acquired new skills, the project’s experience suggests that teachers often need help, especially at the beginning, to actually put these skills into practice. Future programs should consider building a coaching role into the school system to create sustainable support for teachers.

Evidence-based dialogue generates accountability and investment.

Using project data for informed dialogue increased accountability, parental engagement, and teachers’ investment in improvement and confidence in the use of new methods. Sensitivity is advised when introducing learning results for the first time to ensure that poor results do not cause strife. When roles and responsibilities are clarified, data can foster collaboration, motivate effort for improvement, and generate shared pride in accomplishment. Marking “reading milestones” with certificates became a popular source of motivation for students and simultaneously fostered parent engagement by giving parents an easy way to stay updated on their child’s learning trajectory. Parents who are informed by data are, in turn, better able to hold schools and teachers accountable for their children’s learning.

Consider strategies for materials management when scaling up.

For this model to be implemented at scale, more rigorous strategies and systems for materials management will be necessary. Under-resourced schools are not used to having materials and administrators, teachers, and students need to learn how to take care of learning materials. Programs at scale could also consider a voucher system tied to schools’ individual budgets to increase ownership and promote sustainability.
Bhim Bahadur Tharu enjoys every minute in his Grade 2 classroom and can’t imagine how quickly the time flies by at Nepal Rastriya Basic School Baijapur, Banke. The classroom environment is pleasant, and students don’t like to miss his class. They enjoy learning through games and activities and can always be seen engaged in learning, sometimes in pairs, sometimes in groups and sometimes alone reading books and stories written in Nepali as well as their own Tharu language.

Ten years ago, Bhim Bahadur says, he spent his time at school shouting at the small children all day. Textbooks were the only materials he had and the classroom was full of noise with students chanting and shouting answers and copying work in their exercise books. Bhim Bahadur did his best, but with 70 students crammed in a small classroom on uneven desks and benches, it was hard to get even close to the students to see how they were doing. The extreme heat of the summer also sapped the energy of the class. The same old classroom, same textbooks, and endless chanting and repetition made the class even wearier. Even after finishing the course and textbook, students’ learning levels never seemed to improve. Bhim Bahadur, like other teachers, could only say, “However you teach and however hard you try, the students never learn.”

Their hopelessness is gone now. Bhim Bahadur and his fellow teachers have participated in trainings on teaching-learning processes and how to teach the specific component skills of early grade reading. The opportunities to participate in mobile meetings and conferences have broadened their knowledge and supported the teachers’ professional growth. Rearranging the classroom so children can move around for group work and individually access the teacher has made the classrooms more conducive to learning. Each classroom now has a library corner, abundant leveled readers in Nepali and Tharu languages, decodable reading cards, charts, stories books, and big books.

Adopting Tharu as the medium of instruction has increased the interaction between teacher and students helping children learn more. Regular academic support from the Literacy Coach and Resource Person has helped Bhim Bahadur and his colleagues update skills, and brainstorm ideas to address challenges faced in the classroom. Bhim Bahadur’s school has decided to have children stay with their initial teacher for two successive grades. Bhim Bahadur says, “This provides me enough time to get to know each individual student and his or her specific needs and provide further support.”