



Fund for Innovation  
and Transformation

Fonds pour l'innovation  
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CHANGE FOR CHILDREN

# Technology and Training for Quality and Equality in Remote Indigenous Communities

## Context

In the remote Bosawas region of Nicaragua, home to the Miskito Indigenous peoples, teachers and students face a severe lack of educational resources and opportunities. Many teachers have no formal pedagogical training, and schools lack basic supplies and appropriate resources to help students learn.

## The Innovative Solution

Supported by FIT, Change for Children tested a solution to improve educational outcomes in the region through the creation of a remote digital database of resources and a training program for teachers. The project provided mobile learning labs, which included RACHELs (Remote Area Community Hotspot for Education and Learning), laptops and a solar power system to support technology use for 4 Indigenous communities in the Bosawas region.

## Advancing Gender Equality

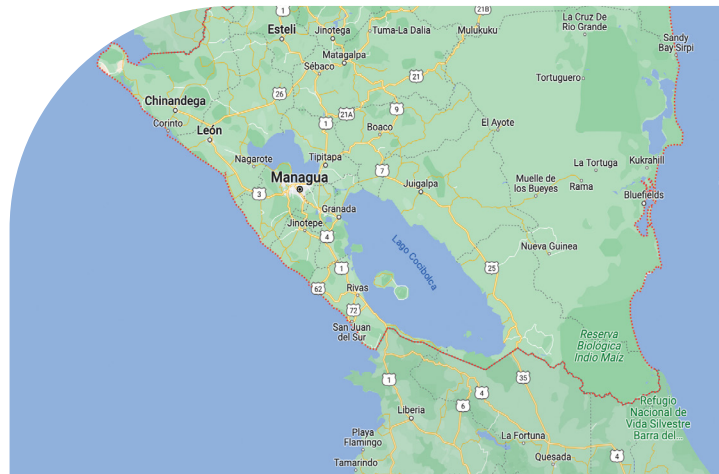
Change for Children tested this solution with over 50% women teachers, and included training around gender equality and sexual and reproductive health as part of the training program. As a result, teachers have become more empowered to address gender dynamics in the classroom and advocate for gender equality issues at the community level.

## Testing Framework

The innovation was tested in four of the largest Indigenous community schools in the BOSAWAS region. Baseline data was collected in two phases before the introduction of the new technology by the Community Facilitators. The first during a field visit of the project staff at the end of month one, and the second after the stakeholder planning workshop.

The testing included the monitoring of:

- Teachers in the pilot schools participating in the MOOC training.
- Teachers using materials on RACHELS in the classroom.
- On-going data collection: Monthly reports on indicators from community facilitators, quarterly data collection through interviews and observation by project staff.



**COUNTRY**  
Nicaragua

**AMOUNT**  
\$250,000

**TESTING PERIOD**  
15 months  
Ended July 2021



**GENDER RESPONSIVE (GE2)**

**THEME: EDUCATION**

Evaluation consisted of: quarterly stakeholder meetings, interviews, and focus groups; a participatory community-based evaluation conducted by participants; and an external outcome evaluation.

## Results and Impact

This solution has had a remarkable impact on educational quality, teacher empowerment and student engagement in the targeted Miskito communities. At the conclusion of the test, 98% of teachers are actively using the resources available on the RACHELS. They are incorporating new teaching methods and actively including Miskito, gender, and SRHR education in their classrooms. The majority of teachers are now able to teach classes entirely in the Miskito language as a result of their access to a variety of linguistic and culturally appropriate materials. Students are demonstrating enthusiasm for school, more awareness of gender and SRHR issues, and gaining skills in the use of technology through the mobile learning labs.

Of note:

- By endline, 98% of teachers reported actively using RACHEL resources, new teaching methods, and acquired new pedagogical skills exceeding the target of 70%.
- At baseline, only 54% of teachers rated their ability as “good” or “very good” to teach Miskito history and culture increasing to 99% at endline while 22% had the same rating for their ability to teach reading and writing in Miskito increasing to 98% by the end of testing.
- By endline, 90% of students reported using technology at least 3 times a week and Miskito materials 2 times a week increasing from 52% at baseline.

## Key Lessons

1. Teachers need continuous technical training and support to integrate technology into their teaching practice.
2. Using technology for more than just “textbook substitution” requires access to interactive educational software and teacher training.
3. Access to Indigenous language and cultural materials facilitates adaptation to the school environment, increases comprehension and learning, and strengthens cultural identity.
4. Technology can overcome key barriers to education for girls and women if used strategically. By offering secondary and professional development opportunities through off-line technology, women and girls can continue their education without leaving their communities, which may be difficult due to prevailing gender norms.
5. Student engagement in their own learning, as well as improved student confidence and learning outcomes, can be stimulated by access to technology.
6. Coordination with local and national governments is critical to project sustainability and scale-up.

“Today, I can proudly say that we use technology to better develop content and teach the children. My classroom environment is entertaining and the children are excited with the new way of learning.” - Ivania Fiallos Cornejo, 2nd grade teacher in Bosawas

## PARTNER ORGANIZATION

- SIMAS: Servicio de Informacion Mesmericano sobre Agricultura Sostenible

## TARGET PARTICIPANTS

Teachers and students in the Indigenous Miskito communities of Bosawas. 123 teachers (56% women) and 2,244 students participated in the testing in 4 schools along the Coco River in the Miskito Indian Tasbaika Kum territory.

## FOR MORE INFORMATION

[Fund for Innovation and Transformation](#)

[Change for Children](#)

## ABOUT FIT

The Fund for Innovation and Transformation supports Canadian small and medium-sized organizations (SMOs) testing innovative solutions that advance gender equality in the Global South.



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