

“ It was most satisfying to observe children and their teachers using new technology in the classroom. They started asking more questions about reading and the content in the books. They became more curious about other tech devices to use with Bookshare. It was wonderful to see their excitement grow. ”

—DR. HOMIYAR MOBEDJI, DISABILITY EXPERT, INDIA PROGRAM MANAGER



## CHALLENGE

Suraj is eight years old and in the third standard at the School for Blind Boys in Bhosari, in the Maharashtra state of India. Children who are blind or have low vision like Suraj face many obstacles. Less than ten percent of the students in the school read at grade level. While mother tongue language instruction is optimal for early reading acquisition, in both braille and audio for students who are blind/low vision, it is a challenge to deliver accessible books in mother tongue languages where no text-to-speech (TTS) engine exists to read these books aloud. Compounding the problem, the cost of creating a high-quality TTS engine is extremely high. Classrooms lack accessible reading materials that allow students to learn at their own pace through various modalities: braille reading, print reading, and/or listening.

## SOLUTION

A grant from All Children Reading: A Grand Challenge for Development funded a project to implement technology-based solutions to improve the reading level of 131 blind and visually-impaired students in grades 2-3 in Maharashtra, India. The primary goal was to teach the students to read in their native language, Marathi. Another goal was to add human-narrated audio capabilities to Bookshare, the world's largest digital accessible library and Benetech's flagship Global Literacy initiative. The team added 2,145 children's books in Marathi, Hindi, Gujarati, and Telugu, plus thousands more books in English to Bookshare. The students listened to accessible educational content on low-cost audio devices while simultaneously following along in their braille books. A "Story Auntie/Uncle" read to students twice a week for an hour in each class. Teachers used handheld teaching tools to expose students to basic reading and writing concepts in braille, concentrating on words already familiar to students through spoken language. Teachers also introduced daily independent reading time which encouraged students to practice on their own.

## IMPACT

A team from School-to-School International evaluated the project and found that students showed significant improvement on all reading assessment tasks. These improvements occurred across gender, grade, and vision levels. Suraj's teacher noted that his use of braille improved significantly, his reading speed has increased, and he loves the stories that are available. Suraj and his classmates are making tremendous progress academically and exhibit increased confidence and self-esteem. Says one of the teachers, Sunanda, "Bookshare has helped the students improve their reading speed and retain their interest in reading the books. They just love listening to these stories, especially the books in their mother tongue." The team in India is building on the success of this project and bringing more books to more people in India every day.

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