



NEW HORIZONS

December 2023

Raised Lines
Foundation

Dear Readers,

As 2023 ends and a new year begins, we are grateful for the new CSR projects signed, collaborations and new books being designed for the greater good of the visually impaired community. Last three months have given us a good head start for 2024. In the December edition of New Horizons, we are happy to share a few key events at RLF with you.

Intel India CSR project

We've signed a CSR project with Intel India under our Touch Learn Shine program in which books will be sponsored for **1000 students** in **15 schools** across Rajasthan, Madhya Pradesh, Maharashtra, Jammu, and Haryana. One complete set of tactile books containing Science, Maths, and General knowledge tactile books will be provided to each student based on his/her class. A total of **5200 books** will be provided under the project. All the students and teachers will be trained by our team on the usage of our tactile books. The project is scheduled to be completed by February 2024.

What's in this Newsletter:

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A student exploring the tactile image of a monkey



VI students engrossed in colouring during one of training sessions of the Touch Learn Shine program

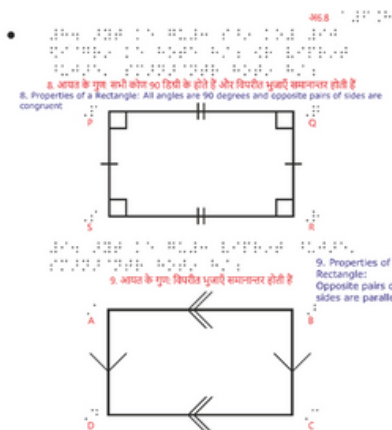
Continental India CSR and Onboard project

Under the CSR project with Continental, we are implementing the Onboard System in **500 BMTC buses** in Bengaluru with an initial pilot in 10 buses. The system helps blind person to *identify the route number and locate the bus entry door*, enabling them to *board buses independently*. OnBoard is a globally unique patented solution developed at ASSISTECH, IIT Delhi and now licensed to RLF for scaling and dissemination.

We have partnered with Enable India for field testing of the devices as well as user identification and training. All these devices are connected to a central server and the usage data will be logged. Globally, Bengaluru will be the first city with such a system installed at scale, *making bus transportation accessible for the Visually Impaired community*.



Onboard system installed in a BMTC bus



Braille descriptions and text in Hindi

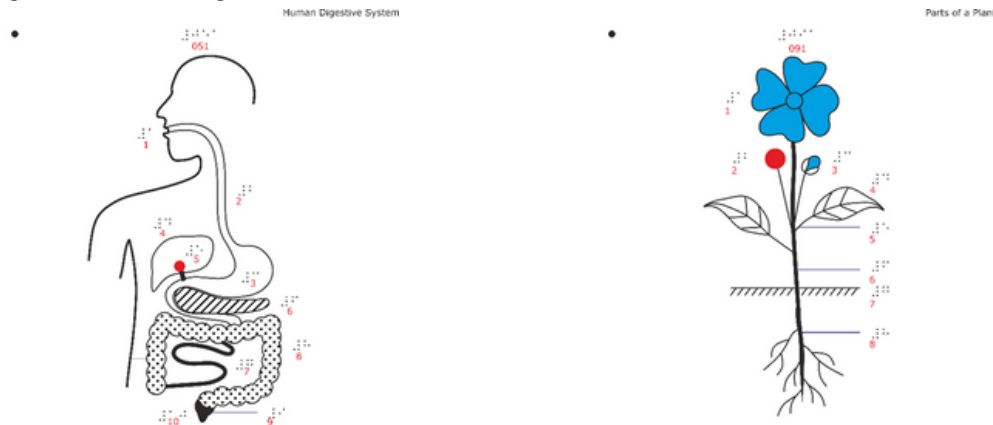
XRCVC Mathematics Module in Hindi

The Encyclopedia of Geometry Diagrams Vol A and Vol B designed along with Xavier Resource Centre for Visually Challenged, Mumbai is being **translated to Hindi**. The Encyclopedia is currently available in English Braille. Volume A has 9 chapters and is recommended for classes 1 to 6 while Volume B comprises advanced geometry recommended for classes 7 to 10 and consists of 12 chapters. The Hindi version is being verified by Saksham School, Noida.

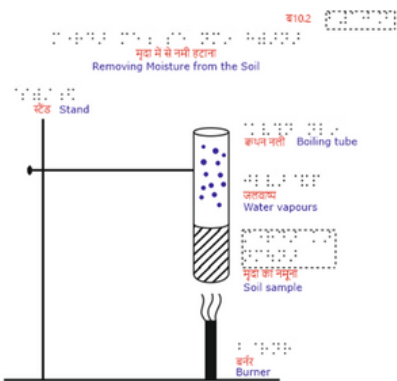
Tactile diagrams with Vembi Technologies and Vision Empower

RLF is working with Vision Empower, Bengaluru and Vembi Technologies, Bengaluru to develop VI friendly tactile diagrams that can assist in simplifying complex science concepts when accessed through IRIS. IRIS is an audio interface developed by Vembi Technologies to learn tactile graphics for visually impaired children. IRIS lets any tactile diagrams to be used with audio overlays in any language. Around 50 diagrams 25 junior and 25 senior have been identified for simplification. Numbers will replace all the textual labels in these converted diagrams and when used in tandem with the IRIS reader it'll provide the descriptions corresponding to each number.

Testing of diagrams is being done at Saksham School, Noida



Tactile diagrams labelled with numbers



Textual descriptions & braille labels in Hindi

Tactile Science Primer in Hindi

Our Science Primer Volume A and Volume B are being translated into Hindi to support Hindi braille medium blind schools. The textual descriptions and braille labels for each diagram will be translated to Hindi. Volume A is recommended for junior students and has 214 tactile diagrams and volume B is for senior students and has 116 tactile diagrams. The book is being developed in collaboration with NCAHT, IIT Delhi and verified by NAB, Delhi.

Intel career fair

We are thankful to Intel for the opportunity to create an experiential booth at Intel Career and Innovation fair on 29th and 30th November, 2023 to raise awareness and sensitize their employees on the challenges faced by VI community and how we can create an inclusive environment.

A sensory experience booth in which coloring tactile pictures, tactile puzzle solving, making 3D shapes, playing with tactile cards, tic-tac-toe, etc. was set up. A digital inclusion booth with hands-on experience on using laptops using screen reading software and an assistive technology booth displayed technologies related to the education and mobility of persons with visual impairment.



Key Touch, Learn and Shine Projects at a glimpse

S.no	Sponsor	Financial year	Item	Quantity	Status
1	Cadence-Concern	2021-22	Books	4150	Completed
			Students	820	
			Schools	12	
			States	4	
2	Vision Aid	2021-23	Books	4422	Ongoing
			Students	989	
			Schools	16	
			States	8	
3	Intel India	2022-23	Books	5200	Ongoing
			Students	1000	
			Schools	15	
			States	7	
4	SBI Foundation	2023-24	Books	TBD	To start
			Students	560	
			Schools	8	
			States	5	

**A Merry Christmas and a very Happy New Year
from all of us at RLF**

*Happy
New Year*



Raised Lines Foundation (RLF)

RLF is a not for profit startup from IIT Delhi with the sole mission of empowering persons with visual impairment and enabling them to pursue subjects and careers of their choice.

What we do - Support education and independent mobility

- Design and produce **tactile books** covering all children books to curriculum books.
- Convert handwritten, printed and digital **documents into accessible formats**.
- Make images accessible through **image descriptions and tactile diagrams**.
- Manufacture **teaching-learning aids** and **educational accessible games**.
- Conduct **teacher training and student training programs** on use of tactile learning aids.
- Special focus on content related to **STEM education**
- Technology solutions for independent mobility

Connect with Us

If you know any person with visual impairment or an
organization or school
who may benefit from our solutions

or

If you want to support persons with visual impairment,
please connect with us:

rlf@raisedlines.org, +91-8929669336

To know more about our work, please visit our website:

www.raisedlines.org

To donate for our cause

