NEW HORIZONS
Rewinding FY 2021-22

Access created

8000+ books disseminated
3000+ diagrams made accessible
200000+ diagrams produced
12 new titles, 2 new aids

Impact created

3000+ new beneficiaries
1500+ students provided books
24+ schools fully covered
200+ schools/orgs made aware

What's in this Newsletter:
- Impact of Touch, Learn and Shine
- Mathematics Kit Trainings
- Making Science & Maths Accessible
- Manual on Safe Mobility
- Digital accessibility of STEM
- Feedback: Students and Teachers
- User Testimonials
- Supporters and Collaborators

Growth and Support

Team grown to 18 employees
Digital accessibility service introduced
15+ collaborative projects done
Supported by 20+ individual donors
2 new CSR partners
Students Empowered through Touch, Learn and Shine (TLS) Program

TLS program aims to enable access to tactile books to 10000+ students in phase 1. Each student receives a set of tactile books and teaching-learning aids under this program. With the support of individual donors and organizations, in 2021-22 RLF has been able to support 1500+ students from 24+ schools.

<table>
<thead>
<tr>
<th>No. of students</th>
<th>No. of Books provided</th>
<th>No. of schools</th>
<th>Supported by</th>
</tr>
</thead>
<tbody>
<tr>
<td>600+</td>
<td>4100+</td>
<td>9</td>
<td>Vision Aid &amp; Social Alpha</td>
</tr>
<tr>
<td>800+</td>
<td>5700+</td>
<td>12</td>
<td>Cadence, Concern India</td>
</tr>
<tr>
<td>100</td>
<td>270+</td>
<td>1</td>
<td>Vehant Technologies</td>
</tr>
<tr>
<td>200+</td>
<td>500+</td>
<td>2</td>
<td>In Collab. with Saksham</td>
</tr>
</tbody>
</table>

The training of teachers and students forms an integral part of this program. Online sessions focused on orienting them towards using tactile diagrams effectively for concept understanding and interpretation were conducted with the schools.

We aim to reach out to 3000+ students from 40+ schools in 2022-23 and continue to work closely with the students we’ve already supported to ensure a positive long term impact by helping them further for education-related requirements.

Teachers and Students Trained to Create Mathematical Diagrams using GEOMKIT

As part of a joint project with Saksham supported by NIIF-IFL under its CSR initiative, 300 Mathematics kits have been provided to 8 schools. They include Tactile Encyclopedia for Geometry Diagrams, DIY graph and GEOMKIT.

Apart from this grant, we have been successful in raising support to provide 900 GEOMKIT to multiple schools and institutions. The support was provided by AUMA under their CSR initiative and multiple individual donors.

RLF and Saksham team jointly conducted training sessions for the teachers and students on effectively using GEOMKIT. Training sessions were focused on how teachers and students can make use of accessible tools and instruments in GEOMKIT for creating Mathematical Diagrams on the Braille Paper itself.
Science and Maths Diagrams from Class 1 to 12 made Accessible

Our design team completed a significant task of making all the diagram oriented concepts in Science and Mathematics (Class 1 to 12) in accessible format by designing their simplified tactile version. In total 3000+ diagrams have been made accessible in the last year with an average of 250+ diagrams per month. This effort was supported by Social Alpha and multiple donors.

The idea is to create a repository of accessible diagrams for students and teachers to order from at a highly affordable price of Rs. 10-25.

Tactile Manual on Safe Mobility and Navigation

An accessible module on Safe Mobility and Navigation has been developed in collaboration with Saksham. It is developed as part of a project supported by the Korea Disabled People’s Development Institute.

The manual aims at introducing the users to the basic concepts of orientation, mobility techniques with a white cane and SmartCane device and Navigation using accessible navigation apps on Smartphone. The manual is available in digital as well as large print+ Braille with Tactile Diagrams allowing readers to read it in their preferred format.

The video tutorials were also created and uploaded on the link below. https://www.youtube.com/channel/UCFTNnpF0GRb0p1H7gSvESX
Science and Maths Books (Classes 1 to 8) from Harper Collins Publishers made Accessible

Accessible content development team converted more than 5000+ pages from Science and Maths books (Class 1 to 8) of Harper Collins Publishers into accessible digital formats, making them readable with screen reader on computer with epub reader apps like Thorium Reader.

Feedback from Teachers and Students

Our team recently conducted a survey with visually impaired students, special educators and decision-makers of the schools where books have been provided in the last year. The objective was to understand whether the books are being used regularly in the schools or they are still facing some challenges.

The response has been overwhelming.

- Almost 100% of students and teachers surveyed felt tactile books should be an integral part of regular classroom learning from primary school.
- Students felt their performance has improved by at least 25% by using these books.
- Teachers confirmed that they are saving 20-30 hours per month using tactile books as they don’t need to create handmade diagrams and can teach larger groups together.
- Getting accustomed to tactile at a young age will pave the way to grasp complex tactile diagrams like the human body, nervous system etc. in higher classes.

90% students said they will opt for Science and Maths in high school if tactile resources are available.
95% teachers felt books are easy to understand and will be very useful in classroom teaching.

Access to Tactile books and Teaching Learning aids

Students:
- Enhanced understanding
- Improved communication
- Better performance
- Confidence to pursue STEM

Teachers:
- Reduction in time and effort and no need for handmade models
- Efficient teaching methods

Schools:
- Inclusion of tactile materials in classroom
- Promotion of STEM education

Transformational change in quality of education for VI enabling them to pursue subjects & career by choice
User Testimonials

Tanmayi, a low-vision student in second grade drew a fish all on her own and coloured it after using our tactile colouring book. After she felt the tactile outline of the fish she was able to re-create it with her twist of creativity. "Colouring book has triggered her interest in drawing, colouring and her imagination" said her teacher, Ms Lakshmi Prabha who shared the images with utmost joy.

"My favourite RLF tactile book is Exploring Windows. With a screen reader, we understand what is displayed on the screen, but we never knew the shapes of the various icons; now with this book, we know the shapes and computer layouts." Mas.Lakshminarayan, a Class 12th student.

Ms. Lakshmi Prabha, a teacher from NAB Chennai told us "Previously we used to create tactile books with thread, 3D liners to teach children which is labour intensive and we have to use one single book to teach several children which was a challenge. Now with RLF books, our work has become considerably easier and more effective. The tactile books are handy and reusable."
A big Thank You to all our donors and partners for believing in us and supporting us in realizing the collective vision of empowering persons with visual impairment!

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
- 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.
- Special focus on content related to STEM education

As the famous Helen Keller saying goes "Alone we can do so little; together we can do so much." we've experienced it first-hand with significant collaborations and supporters.

Our Collaborators

Our Supporters
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