The XRCVC’s Annual Report for 2021-22 (June to May)

Xavier’s Resource Centre for the Visually Challenged (XRCVC)

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Annual Report for 2021-22 (June to May)

As the St. Xavier’s college campus gradually opened up once COVID-19 numbers began to come down, XRCVC’s activities for the academic year 2020-21 shifted to hybrid mode. The centre was renovated as per COVID protocols, as, having been shut down for almost two years, refurbishing and renovation was required. It opened up for staff, students, volunteers and interns in January 2022. Our training programmes, content-creation, and other activities continued with renewed vigour in this new normal.

In January 2022, St Xavier’s College entered into an agreement with the Maharashtra State Faculty Development Academy (MSFDA), which has been set up by the Department of Higher and Technical Education to impart training to the faculty of Higher and Technical Education Institutions of Maharashtra. As part of this agreement, MSFDA has identified the college, and more specifically, XRCVC, as a collaborator for the development and implementation of capacity-building workshops for faculty members of Universities and affiliated colleges under the Dept of Higher and Technical Education. St. Xavier’s College (Autonomous), Mumbai (XRCVC) and MSFDA will jointly implement a program titled ‘Training of Teachers in Inclusive Education’ under this collaboration. The first training session under this collaboration was conducted in Pune in April 2022.

Additionally, XRCVC’s SHAMIL project — which aims to promote inclusive education and further strengthen the inclusive education work in educational institutions across the country made rapid strides during the year.

Ms. Poonam Deokar displaying various assistive technologies to Dr. Nipun Vinayak, Executive Director (MSFDA), Dr. Rajendra Shinde Principal - St. Xavier’s College and other members of MSFDA at the Inaugural session in Pune at the MSFDA facility
Likewise, our agreement with Atma, a leading NGO Accelerator which provides strategic solutions to help NGOs and social enterprises to build their capacity and help them become bigger, better, and stronger, continued.

The XRCVC works to improve the lives of people with disabilities on both micro and macro levels. We work closely with government organisations, corporations, researchers, and educational institutions on empowerment and sensitization initiatives at the macro-level, particularly in the areas of education access, financial access, print access, and independent living, in addition to providing direct and indirect support at the micro-level.

Initially established as a reference and advocacy centre for people with vision impairment, the XRCVC is now a nonprofit organization which is an integral part of St Xavier’s College (Autonomous). In the academic year 2018–19, the college increased this offering to include services for students with autism, learning disabilities, hearing/speech impairments, and orthopedic disabilities as well.

To provide members and other stakeholders with information regarding our work on a nearly real-time basis, visit our website (www.xrcvc.org), our inclusive education resource (https://sites.google.com/xaviers.edu.in/xrcvc-inclusive-education/xrcvc), and our social media pages (XRCVC—Xavier’s Resource Centre for the Visually Challenged) and Twitter handle (@XRCVC).

In the academic year 2021–2022, 126 students with disabilities were enrolled at St. Xavier’s College (Autonomous) in both junior college and senior college combined. A rewarding experience in both their coursework and extracurricular activities was overlooked by the college’s Enabling Committee, which is a staff-student representation group that facilitates all inclusion and accessibility requirements on campus. The major resource for handling all student requests and needs is the Coordinator for Students with Disabilities, who works out of XRCVC and manages the activities of this committee. The XRCVC consistently promotes inclusion and access around the nation in addition to supporting the needs of students on campus through a variety of training, advocacy, and awareness programmes.

**Membership base**

In 2021-22, the XRCVC’s membership base expanded to 851 persons. However, we do not restrict our offerings solely to our members. Our advocacy work allows us to touch — and hopefully transform — thousands of lives across the country.

We offer a range of direct support and training services to persons with disabilities, caregivers, educators, and institutions. Direct support provided includes scanning, demonstration of and training in the usage of assistive devices, career advice, basic computer training, software assistance, mobile phone usage training, smart cane usage training, Braille printing, follow-up with publishers for accessible copies of books, coordinating with educational institutions, banks and other financial bodies, etc.

**Volunteer support**

Despite all the advancements in technology, human assistance cannot be eliminated completely for persons with disability. The XRCVC provides volunteer services for:

- Reading
- Converting material into accessible formats for people with visual impairment — through typing, scanning, editing, recording
- Teaching — for any subject
- Examination taking — scribe facilities (this service is provided in collaboration with the Student Inclusion Cell of St Xavier’s College)
- Any other requirement on a need basis

Depending on the member’s needs and requirements, the XRCVC provides volunteers both for short- and long-term needs. Approximately 170 volunteers and 7 interns worked with the centre during the year. These volunteers were drawn from the college’s SIP programme and ECC programme.

**Assistive technologies**

The XRCVC houses an exhaustive list of assistive technologies (AT) that can be explored by persons with disability — as also employers, government bodies, and any other group that would like to know more about AT. Anyone is welcome to drop in at the XRCVC, with prior appointment and keeping COVID protocols in mind, to explore the full range of assistive technologies and their use.

The centre purchased and upgraded its specialised software and hardware during the year. This included updating its screen reader (JAWS), screen-reader-cum-magnifier (Supernova), acquiring and updating its OCR licenses for Abby fine reader and KIBO, acquiring other specialized software, namely GrindEQ MathType-to-Equation and Tactile View graphic Software, and acquiring hardware which included a C-Pen Reader, a portable OCR-based reader as also a Graphic drawing tablet.

**Focused work areas**

During the year, the XRCVC’s activities were channelised through three main focus areas:

a. Education & Learning (KG to PG)
b. Accessibility Solutions and Inclusive Services
c. Awareness

Given below is a summary of the activities in 2021-22 under each head.

**A. Education & Learning (KG to PG)**

While Right to Education has become a fundamental right in India, this right is far from being actualised for persons with disabilities. During the year, the XRCVC continued its work towards inclusive education practices and services at school, college, and higher education levels. A plethora of activities were conducted during the year in this connection, some of which are described below.

- The XRCVC provided all the resources and manpower to St Xavier’s College that were required to ensure the smooth conduct of the Enabling Committee’s activities during the year.
- Ongoing work continued with students who are part of the XRCVC’s comprehensive educational offering. During the year, we also regularly conducted training and sensitization sessions at Prime Academy (Andheri), Aarose International (Ulwe), and the South Indian Association.
The other institutes we worked closely with during the year in helping the set-up of inclusive educational services are Sir P.T. Sarvajanik College of Science (Surat), IIT Delhi, IIT Madras and Kirori Mal College (Delhi).

Work pertaining to book content creation and accessible study material creation continued through the year. Both staff and volunteers are engaged in this.

We continued to collaborate with our various partners — including Inclusive Stem (I-Stem), Vision Empower, Social Alpha, Inter University Alliance (IUA), and Andrews Vision Centre any more.

The XRCVC, through the year, continued its ongoing pioneering work in the area of mathematics and science education. Students were provided direct support services. The centre created accessible electronic textbooks, Teaching-Learning Aids (TLAs), and provided conceptual training to these students. In addition, it continued to build on its Teaching-Learning Aids (TLA) resource library for mathematics and science education, starting Std 1 onwards.

Ongoing work continued on the production of Concept Teaching Manuals (CTMs), which have been designed for use by teachers working with blind or low vision students. Special educators or parents working on a one-on-one basis, as well as classroom teachers and tuition teachers in an inclusive classroom can incorporate the information and ideas from these manuals. These CTMs cover interactive ways to teach concepts to blind or low vision students including the use of Teaching-Learning Aids (TLAs) in the form of activities, real objects, 3D educational toys and models, 2D tactile diagrams, etc.

Other activities conducted during the year as part of XRCVC’s inclusive education programme include a certificate course on disability studies at Wilson College, a STEM Awareness Workshop in collaboration with Enable India, and a five-day long online interdisciplinary faculty development program titled ‘Inclusive Pedagogy: Engaging Students With Disabilities’ for college professors across the country in collaboration with The Centre for Disability Research and Training (CDRT), Kirori Mal College, University of Delhi in January 2022.
A national five-day online interdisciplinary faculty development program titled ‘Inclusive Pedagogy: Engaging Students with Disabilities’ for college professors was conducted by the XRCVC in collaboration with The Centre for Disability Research and Training (CDRT), Kirori Mal College, University of Delhi.

**Personal and Career Guidance**

Guidance was also provided to members and their families across disabilities to identify needs, interests and aptitudes as also troubleshoot and cope with concerns.

**Scholarships**

In the past decade, students with disabilities have sought out new opportunities in higher education. However, newer prospects come with newer expenses for college courses. Computers and assistive technology have greatly aided impaired students. It must be kept in mind here that what is frequently seen as a luxury for people without disabilities is a necessity for people with disabilities. The XRCVC recognises the high costs of higher education and assistive technologies and offers scholarships and loan programmes for access technology to qualified students.

Sukruta Lotlikar, the topper among visually impaired graduates of St. Xavier’s College, Mumbai, received the Lions Club of East Bombay Scholarship for the year. Four senior college students who are visually impaired received further education scholarships thanks to the assistance of the XRCVC. Each of them received Rs. 10,000 from the Help the Blind charity.

Under XRCVC’s AT loan scheme, assistive technology devices like laptops, personal computers, handheld video magnifiers, were given to 7 members during the year. A distribution of Smartcanes was organised in XRCVC’s Viviana Extension in Thane in May 2022, where canes were distributed to 19 visually impaired persons.
SmartCane distribution was held at the XRCVC Viviana Extension, Thane.

The Smartcane training being conducted by Mr. Keshavan Nadar at St. Xaviers College, Mumbai.

**Training**

The XRCVC imparts training in Computers, the use of specific assistive devices, Braille, Orientation & Mobility, Maths & Science, English language, and Life Skills through various training programmes. These are available for diverse learner groups — disabled persons, special educators, teacher trainers, and other stakeholders. Online training sessions during 2021-22 included customized workshops by various members of the XRCVC team including Poonam Deokar, Vikas Dabholkar, Neha Trivedi, Sushil Pandit, Keshavan Nadar, Krishna Warrier, Calveena D’Sylva, and Aniket Gupta. Through the year, the XRCVC’s training services reached out to a wide variety of participants (see Table 1).
## Table 1: Education and Learning (June 2021 – May 2022)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Training and Workshops</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1a. Computer Training and Assistive Technology awareness workshops</strong></td>
<td>68</td>
<td>707</td>
</tr>
<tr>
<td><strong>1b. Special Skills Trainings for Persons with Disabilities</strong></td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td><strong>1c. Stakeholder Trainings (for teachers)</strong></td>
<td>10</td>
<td>236</td>
</tr>
<tr>
<td><strong>1d. Access Content Creation (Persons trained)</strong></td>
<td>11</td>
<td>167</td>
</tr>
<tr>
<td><strong>1e. Access Content Creation (No of Pages Created). During the academic</strong></td>
<td>-</td>
<td>6504 (pages 2021-22, the XRCVC produced 37 accessible books (totaling 5278 pages) and additionally 1226 Word pages / PPT slides of class notes.</td>
</tr>
<tr>
<td><strong>1f. Guidance Support for Persons with Disabilities and Families</strong></td>
<td>-</td>
<td>26</td>
</tr>
<tr>
<td><strong>1g. Inclusive Education Support (For St Xavier's College Students)</strong></td>
<td>-</td>
<td>126</td>
</tr>
</tbody>
</table>

Ms. Calveena D’Sylva conducting an Orientation and Mobility training with 3 learners, using the white cane.
Mr. Vikas Dabholkar conducting an online Basic Computer Training for participants from GHANA.

Mr. Vikas Dabholkar conducting an online Intermediate Computer Training program.
Online Workshop on an Amazing Online Library Part 1 - 11 Sep 2021

Xavier's Resource Centre for the Visually Challenged

St. Xavier's College, (Autonomous) Mumbai | XRCVC VIVIANA EXTENSION (THANE)

Mr. Vikas Dabholkar conducting online assistive technology awareness workshops, Tech-Roshini.
Level 1 Special Skills Training for students in mainstream schools is being conducted by our special educators Ms. Shizanne D’mello and Ms. Poonam Deokar.
Mr. Keshavan Nadar training 4 persons with blindness in the use of TalkBack, to operate mobile phones with an Android operating system.

In May 2022, two external domain experts, Prashant Naik and Saidarshan Bhagat, conducted a session titled ‘Using Assistive Technology for Advanced excel With JAWS’ in XRCVC Viviana Extension.

Mr. Prashant Naik, Mr. Vikas Dabholkar and Mr. Saidarshan Bhagat conducting a session titled ‘Using Assistive Technology for Advanced excel With JAWS’ at XRCVC’s Viviana Extension Thane.
B. Accessibility Solutions and Inclusion Services

Alongside Education Access, the XRCVC’s advocacy initiatives work in three main areas to create accessible environments: Print Access, Financial Access, and Independent Living.

Print Access

The accessibility of printed works for people with visual impairments depends on their availability in accessible formats and the legal framework’s acceptance of material conversion to accessible formats. The XRCVC has been putting in great effort to battle these obstacles.

During the academic year 2021-22, the XRCVC produced 37 accessible books (totalling 5,278 pages) and additionally 1226 Word pages / PPT slides of class notes.

Some of the other activities conducted under the Print Access initiative during the year are appended below.

- The centre was actively involved during the year in diverse Daisy Forum of India (DFI) print access activities focused on print-disabled persons.
- Accessible Book Production Standards training sessions were conducted regularly during the year by the XRCVC for numerous stakeholders.

Technology and Accessibility

The XRCVC devotes a significant amount of its efforts toward educating society at large and people with disabilities about access technology. Under the name "Reading Without Seeing," we inaugurated a very successful national awareness campaign in 2012. This outreach programme brought access technology to people who have low vision or blindness everywhere, and sparked the audience’s interest, and gave them the fundamental knowledge to start their journey toward independently accessing the printed word. Participants in the class left with a basic understanding of a variety of assistive technology.
Calculations & Graphs

- Desmos
- Audio Graphing Calculator, Talking Calculator, Computer based calculators
- Drawing: Tactile Drawing Tool and Geometry Set

Reading Without Seeing workshops being conducted online.
On the occasion of Global Accessibility Awareness Day, XRCVC conducted an awareness Workshop on Accessibility by showcasing the assistive technologies such as Infra, Web and Daily living for bankers at BKC SBI Local Head Office for SBI Foundation Centre for Excellence (COE).

XRCVC demonstrated assistive technologies at the Global Accessibility Awareness Day event organised by the SBI Foundation.
Testing and Research

In addition, XRCVC tested the following devices / software for accessibility during the year: In addition, XRCVC tested the following devices / software for accessibility during the year: The St Xavier’s College website and exam marksheet portal, modules created by Sol’s Arc, the Chetana website, Gradeazy and Eyecan app. Details about the work conducted this year in the areas of technology, accessibility, testing and research are available in Table 2. Details about the work conducted this year in the areas of technology, accessibility, testing and research are available in Table 2.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2a. Access Technology and Mainstream Technologies / Websites / Mobile Apps worked with for building accessibility</td>
<td>7 devices, apps, websites tested</td>
<td>-</td>
</tr>
<tr>
<td>2b. Access Technology Awareness workshops for General Audience</td>
<td>15 workshops</td>
<td>544</td>
</tr>
</tbody>
</table>

Financial Access

The ability to independently manage, operate and execute one’s financial transactions is key to independent living. Lack of effective guidelines and lack of optimum use of technology in financial instruments has traditionally denied financial access to blind and low vision persons. The XRCVC has been striving to change this reality.

We also continued our close collaboration with the State Bank of India’s Centre of Excellence (CoE), providing inputs for its various projects and programmes. The Centre of Excellence for PwDs is one of the SBI Foundation’s flagship programmes. It was conceptualised with a goal to be a centralised support centre for persons with disabilities. It primarily works on empowering PwDs through skill enhancement to make significant and measurable improvement that enables individuals to enjoy a more productive and satisfying life by optimising their cognitive, physical, social and vocational functioning.

C. Awareness

One of the main areas that will open opportunities for visually impaired people and those with other disabilities in a world where the rules are created for and by persons without disabilities is raising awareness about their lives and skills.

Antarchakshu® — The Eye Within is the title of XRCVC’s flagship awareness programme. It is an immersive journey where sighted individuals gain insight into the world of people who are visually impaired. This programme was given a new avatar in 2018–19 as Antarchakshu® 2.0, where it is delivered as a series of customised, need-based sensitisation and awareness workshops in a marathon run reaching out to better numbers at the location of participants. This year, with the Covid-19 threat continuing to loom over the country but with lessening intensity, Antarchakshu® 2.0 was conducted both online and offline, reaching out to many diverse stakeholders such as college students, corporates, professionals and the public at large.
Mr. Krishna Warrier conducting online awareness and sensitization workshops Antarchakshu 2.0.
Mr. Krishna Warrier conducting offline awareness and sensitization workshops Antarchakshu 2.0 at various locations including Hyderabad, Gandhinagar and Mumbai.

Diversity Discourse, a special course that XRCVC had created for the Xavier Institute of Communication (XIC) in 2018–19, continued to be taught through the year. The goal was to raise participants’ awareness of the various communities that society disregards both implicitly and overtly and to present a case for why it is imperative to include these communities in the mainstream of public discourse. The content was imparted mainly through interactive workshops to 236 students at XIC. Additionally, this course was also offered to students of St Xavier’s College and Sophia College for Women. Awareness events were conducted for a variety of target groups across the year (see Table 3).

Table 3: Awareness and Sensitisation (June 2021 – May 2022)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Workshops</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a. Antarchakshu Workshops</td>
<td>78</td>
<td>2624</td>
</tr>
<tr>
<td>3b. Diversity Discourse Course</td>
<td>11</td>
<td>337</td>
</tr>
</tbody>
</table>
**Covid -19 Vaccination Drive**

From June 2021 the XRCVC had a special tie up with the Saifee Hospital to provide Covid protection through a vaccination drive. This was initially available for visually challenged persons who we would be sending to the hospital. Later, Saifee was very considerate enough and through open the service to all XRCVC and St. Xavier’s College staff, students as also families. In most cases appointments were given the very next day. We are very grateful to Saifee Hospital for this help.

**Conclusion**

We would like to extend our gratitude to our funders, partners, and sponsors who have played a major role in making us what we are today.

We would like to specially thank Mr Burjor H Antia, Dhun Pestonji Parakh Discretionary Trust, Mr. Vikram Utamsingh, Firoze Nowroji Daroga Trust, Sheth Developers and Realtors (Viviana Mall), Lila K Jagtiani Foundation, N M Wadia Charities, Mendonsa Foundation, Morlidhar Premchand Shah and Pushpavati Morlidhar Shah Trust, Ms Samakti Amit Shinde, Late Ervad Hormusji Pestonji Antia & Mrs Dinamai Hormusji Antia Trust, Mr Ankush Jain, Mr Kunal Vilas Karnik, Ms Rashna T Doongaji, Ms Vahbiz Pestonjamasp, Ms Persis Pestonjamasp, Lions Club of East Bombay, Futurz Staffing Solutions Pvt Ltd, Godrej Industries Ltd, Union Bank of India, SBI Mutual Fund and Tata Sons Pvt Ltd.

Many thanks to our sizeable team of volunteers, whose dedication makes it possible for a simple organisation like the XRCVC to make a big impression and impact the lives of many individuals across the nation. We would like to express our sincere gratitude to St. Xavier's College for showing other educational institutions around the country how a place of learning may actually be inclusive for people with disabilities. A special appreciation to the principal, Dr. Rajendra Shinde, whose unwavering support and direction have enabled the XRCVC to maintain its status as a centre of excellence across the country.