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

The XRCVC’s Annual Report for 2017-18 (June to May)

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Academic year 2017-18 was a watershed year for St Xavier’s College (autonomous), as it formally launched all the support services of its Enabling Committee right during the year.

At the forefront of this initiative was the Xavier’s Resource Centre for the Visually Challenged (XRCVC) (www.xrcvc.org), which, since 2003, has been actively espousing the cause of visual impairment, and this year expanded its scope to formally include students with other disabilities like autism, learning disabilities, orthopaedic disabilities, and hearing and speech impairment, as well.

In the academic year 2017-18, the college had 110 students with disability on its rolls. The Enabling Committee, a staff-cum-student representative committee headed by the Principal, ensured that each of these students had an enriching curricular and extra-curricular experience at St Xavier’s College (Autonomous). The Coordinator, Students with Disability, who coordinates the working of this cell, works out of XRCVC and is the main resource person to process all student requests and needs.

In addition to meeting requirements of students on campus, the XRCVC is also actively involved in promoting inclusion and access across the country through its range of advocacy and awareness programmes.

Along the way, there was recognition as well. For its efforts to promote accessible publishing globally, the DAISY Forum of India (DFI), of which the XRCVC is an integral part, bagged the 2018 ABC International Excellence Award for Accessible Publishing in the Initiative category at the London Book Fair in 2018. This award, said the DFI president, was an acknowledgement of the collective effort and the joining of forces of the Government of India, industry and civil society to end the book famine for the economically, geographically, socially and linguistically diverse group of people in India who are print disabled.

Meanwhile, XRCVC’s membership base expanded to 651 persons during the year. The centre was also able to touch—and hopefully transform—thousands of lives across the country through its advocacy work, particularly in the areas of education access, financial access, print access, and independent living (see section sub-titled ‘Advocacy’).

Like in the previous academic year, the centre’s activities through the year were channelised through its restructured triad of work:
• Direct Support Services
• Advocacy
• Awareness

Given below is a summary of the centre’s activities in 2017-18 under each head.

Direct Support Services

The XRCVC offers a range of direct support and training services to persons with disabilities, caregivers, educators, and institutions.

1. Volunteer Support: Despite all the technology and advancements, human assistance cannot be eliminated completely. The XRCVC provides volunteer services for:
   - Reading
   - Converting material into accessible formats for people with visual impairment – through typing, scanning, editing, recording
   - Examination taking – scribe facilities
   - Teaching – for any subject

Depending on the member’s needs and requirements, the XRCVC provides volunteers both for short- and long-term needs.

Ninety-seven volunteers and around six interns worked with the centre during the year, sourced from the Social Involvement Programme (SIP) and ECC programme of St Xavier’s College (Autonomous). In addition, volunteers were enlisted for a short term on need basis for awareness programmes like Antarchakshu® —The Eye Within.

Technologies

The XRCVC houses an exhaustive list of assistive technologies (AT) that can be explored by visually challenged persons — 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, preferably with prior appointment, to explore the full range of assistive technologies and their use.

Like every year, the centre procured a wide range of new technologies in 2017-18. Some of these include the newly-launched Refreshable Braille Displays BrailleMe and Orbit Reader 20, Amazon Echo Devices, Daisy players, Talking Colour Recogniser, Talking Scientific Calculators, Talking Graphic Calculators, Talking Measuring Tape, Horizon A4 scanner, storage devices, Sony LED TV,
Fire TV stick, desktop and laptop computers, plus a variety of software upgradations including Duxbury Braille translator, Tactile View Graphics Design, Chatty Infinity Mathematics OCR, and Abby fine Reader.

Our newly acquired Braille Embosser Index V5 Fanfold was set up and deployed in St Xavier’s College (Autonomous) in June 2017. Simultaneously, the existing Brailler was shifted to the XRCVC - Viviana Extension, our satellite centre in Thane, where brailling facilities were launched on June 27 by Mr. Sunil Shroff and Ms. Rima Pradhan from Viviana Mall and Mr. Kumar Rajagopalan, CEO of the Retailers Association of India.

Brailing facilities were introduced in XRCVC Viviana Extension in June 2017

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.

Training sessions during 2017-18 included customised workshops by various members of the XRCVC team including Calveena D’Sylva, Rebecca Carvalho, Vikas Dabholkar, Neha Trivedi, Sushil Pandit, Shizanne D’Mello, Keshavan Nadar, Krishna Warrier, and Elisha Lopez.
These training sessions were held at the XRCVC and the XRCVC-Viviana Extension as well as at other locations across Mumbai.

Through the year, the XRCVC’s training services reached out to 919 persons. (see Table 1).
Table 1: Training Services June 2017 – May 2018

<table>
<thead>
<tr>
<th>Direct Training</th>
<th>No of beneficiaries</th>
<th>Indirect (Stakeholder) Training</th>
<th>No of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer &amp; Assistive Technology (AT)</td>
<td>233</td>
<td>Indirect Stakeholder Training</td>
<td>213</td>
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<tr>
<td>English</td>
<td>19</td>
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<td></td>
</tr>
<tr>
<td>Orientation and Mobility</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities of Daily Living</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Braille</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Skills</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Support (Including Mathematics &amp; Science)</td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance Support</td>
<td>248</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion Cell</td>
<td>98</td>
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<tr>
<td>Sports Club</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>706</strong></td>
<td><strong>Total</strong></td>
<td><strong>919</strong></td>
</tr>
</tbody>
</table>

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

The Lions Club of East Bombay Scholarship for the year was awarded to XRCVC member Talha Ansari, for being the most deserving visually impaired student graduating from St Xavier’s College, Mumbai.
Talha Ansari received the Lions Club of East Bombay Scholarship for 2017-18

Recognising the high costs for higher education and assistive technologies, the XRCVC provides scholarship and access technology lending schemes to deserving students. New higher education avenues have been pursued by students with disability over the last decade. Along with new opportunities come new costs of higher education courses. Similarly, while assistive technologies and computers have provided immense aid to disabled students, what is often considered a luxury for those without disabilities is a necessity for the disabled.

**Sports and Recreation**

Oftentimes, recreation and sports get left out in discussions on lives of persons with disabilities. However, these are as integral a part of life for persons with disabilities as for the non-disabled.

Recognising the value of sports and recreation, the XRCVC works on creating innovative opportunities and events. Between August 2017 and January 2018, the XRCVC Recreation Club conducted regular fitness and training sessions under the supervision of Dr Thomas Pires, Sports Director, St Xavier’s College (autonomous).
Reading Without Seeing

The XRCVC had launched an extremely effective national-level awareness programme in 2012 under the banner of ‘Reading Without Seeing’, which takes access technologies to blind and low-vision users across locations, and ignites in its audiences the curiosity and basic knowledge to begin their journey of accessing the printed word independently. The programme equips participants with the basic knowhow of a host of assistive technologies.

The programme gained added momentum this year with 13 workshops reaching out to 276 persons. These workshops were conducted by the XRCVC team comprising Sushil Pandit, Keshavan Nadar, Aniket Gupta, Vikas Dabholkar, Calveena D’Sylva, and Shizanne D’Mello.

Table 2: Reading Without Seeing (RWS) Workshops (June 2017 – May 2018)

<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Organisation Name</th>
<th>Venue</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>09-Jul-17</td>
<td>Thane Members</td>
<td>XRCVC-Viviana Extension</td>
<td>32</td>
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<tr>
<td>2</td>
<td>16-Jul-17</td>
<td>Open Members</td>
<td>XRCVC-Viviana Extension</td>
<td>34</td>
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<tr>
<td>3</td>
<td>19-Aug-17</td>
<td>University / college professors</td>
<td>St. Xavier's College</td>
<td>26</td>
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<tr>
<td>4</td>
<td>11-Oct-17</td>
<td>NAB-IDBI Ambernath</td>
<td>Ambernath</td>
<td>25</td>
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<tr>
<td>5</td>
<td>16-Oct-17</td>
<td>Open Members</td>
<td>XRCVC</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>6-Jan-18</td>
<td>Ummeed Foundation</td>
<td>XRCVC</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>06-Jan-18</td>
<td>Ummeed Foundation – Mumbra</td>
<td>XRCVC-Viviana Extension</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>24-Feb-18</td>
<td>Maratha Mandir</td>
<td>XRCVC-Viviana Extension</td>
<td>15</td>
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<tr>
<td>9</td>
<td>14-Mar-18</td>
<td>Nirmala Niketan Students</td>
<td>XRCVC</td>
<td>10</td>
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<tr>
<td>10</td>
<td>17-Mar-18</td>
<td>TCS Maitree</td>
<td>XRCVC-Viviana Extension</td>
<td>12</td>
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<tr>
<td>11</td>
<td>11-Apr-18</td>
<td>NAB-IDBI (Ambernath)</td>
<td>XRCVC</td>
<td>27</td>
</tr>
<tr>
<td>12</td>
<td>17-May-18</td>
<td>NAB Short-term teenagers group</td>
<td>XRCVC</td>
<td>28</td>
</tr>
<tr>
<td>13</td>
<td>29-May-18</td>
<td>NAB - Para Professional &amp; Functional Batch</td>
<td>XRCVC</td>
<td>26</td>
</tr>
</tbody>
</table>

276
XRCVC’s advocacy initiatives work in four main areas to create accessible environments: Print Access, Financial Access, Education Access, and Independent Living.

Print Access

The access to printed works for the visually challenged depends on its availability in accessible formats and the permissibility of the legal systems to convert material to accessible formats. The XRCVC has been working relentlessly to overcome these challenges.

During this period, the XRCVC produced 42 accessible books (totaling 8232 pages) in addition to 2465 Word pages of class notes. All accessible DAISY titles are uploaded onto a national accessible online library (sugamypustakalaya.in).

Some of the events that took place or were conducted under the Print Access initiative during the year are appended below.

- XRCVC worked closely with Benetech, a global non-profit social entrepreneurial venture harnessing the power of technology for social benefit on many print access-related initiatives, and also followed up with vendors who could create accessible books. In June, a training programme on accessible publishing was organised at St Xavier’s College. The training was conducted by senior officials from the Daisy Consortium and Benetech.
- Through the year, XRCVC provided support and feedback to many organisations which were conducting research on Refreshable Braille Display devices. These included Innovision, a startup from IIT Bombay which successfully launched its Refreshable Braille Display device named BrailleMe, IIT Delhi’s Assistech, Orbit Research, Dot Incorporation - Korea, and a group of students from Don Bosco Institute of Technology.
- Dr Sam Taraporevala, Director, XRCVC attended a meeting convened by the Braille Council of India in Guwahati in March. He also attended a core group meeting for ADIP schemes in Guwahati.
- In August, the XRCVC team met with Jet Airways officials to offer suggestions on how they could make their Inflight Manuals and Mobile App accessible. They also had meetings with Hillary Johnson, an MIT student working on a Braille Labeler project, and Pratham, regarding making accessible books for their libraries.
In September, Dr Taraporevala attended the Daisy Forum of India (DFI) board meeting and AGM at Jawaharlal Nehru University, Delhi, and also participated in discussions on Viable, a platform which networks like-minded organisations working in the field, alongwith officials from Saksham, Enable India, Bookshare and Eyeway. Through the year he also participated in con-calls for various committees of the DFI, including the publisher committee, higher education committee, and periodicals committee.

Officials from the Rotary Club of Lake City (Thane) visited XRCVC-Viviana Extension to understand the working of the centre as they wish to set up a similar resource centre in Thane.

Dr Taraporevala delivered a talk on ‘The ABC of Accessibility’ in February at the JJ School of Art

They also met with a team from Robotix.Edu on making their smart toys braille accessible.

Testing and Research

The following software / devices were tested for accessibility during the year by / at XRCVC:

- New Kindle Amazon apps PC & Cloud Reader with NVDA
- AMIS, Easy Reader apps with NVDA
- Sugamya Pustakalya website
- OCR apps like Cam Scanner, Adobe Scan, Text Fairy - Marathi, Hindi, English language for Android phones.
- Explore Libre office writer
- Android Nougat 7.0 on a Lenovo phone
- Normal Keyboard & Mouse in Android Phones with TalkBack
- Easy Reader App
- Android 7.0
- Voice input of Lenovo K6 Note
- Google Drive
- Tesseract OCR engine-based OCR software for Indian languages
- NVDA’s OCR features
- Ideal OCR
- Smart Lens OCR app with Android 7.0 Lenovo K6 Note
- Redbus.in website by NVDA at various browsers and android apps.
- Gujarati Maths Epub files
- Android Gionee P5L Mobile
- YouTube page with latest NVDA
- IRCTC website
- Remote access add ons of NVDA
- Moto C
- Moto E4 plus
- Polaris & Office Suite Android apps
- Windows 10
- Vivo Y55
- Simply Reading App (Epub Reader) with 7.0 Android Lenovo K6 Note
- Kindle application and NVDA Help
- Surfing information pertaining to Android and other OS
- Surfing information pertaining to Wallet facilities of UPI (Paytm, Freecharge, Mobikwik, and other UPI apps (BHIM, Google Tez)
- Mozilla Firefox with NVDA
- Clear Reader
- Amazon Alexa and Google home devises
- UTS Basic App
- Itel Keypad Phone with King Voice App
- Oppo A5 Model phone
- Redmi 5A phone
- Redmi Note 4 phone
- Redmi Y1 Lite
- Vivo Y21 (5.1.1 Lollypop) phone
- MS Office Word 2010 with NVDA 2017.3
- Google Lite app from website (Files Go, Youtube Go, Google Assistant)
- TacRead: Assistech
- Go android apps - Youtube Go, Files Go, Google Maps Go tested with 7.0 Android
- MP3 cutter and Audacity app
- Rediffmail Pro
- Accessible App Money Reader tested with Indian rupees and coins
- NVDA Dictation Bridge Addon
- Eye D App
- Shine Plus screen reader for android
- Samsung Default OCR apps
- Textfi accessible apps
- Smart Lens OCR
• Induction cooktop
• Refreshable Nemeth

During the year, XRCVC, with the support of Sightsavers, launched a new project, Project Access—Sightsavers-XRCVC initiative, which focuses on testing accessibility across devices, platforms, and companies. As part of this project, the XRCVC team held multiple meetings with Reliance officials to make the Reliance Jio offering accessible.

In December, Dr Taraporevala met with Mrunmaiy Abroal from Amazon in Bangalore to discuss accessibility and other feature enhancements of the company’s Echo devices.

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 had traditionally denied financial access to the blind and low vision persons. The XRCVC has been striving to change this reality. Some of the activities under the Financial Access initiative are appended below.

• In August, the XRCVC team participated in a meeting of the Indian Banks Association’s Special Committee on Banking Access and has provided constant inputs through the year for improving inclusion within the banking system. Additionally, XRCVC assumed the responsibility to manage and administer the popular Accessible ATM website, talkingatm.org, from its founders, Sai Bhagat and Prashant Naik. Through the year, XRCVC members physically checked many ATMs across the country for accessibility.
• In September, officials from the Bombay Stock Exchange visited XRCVC to plan out a course on mutual funds for visually impaired persons.
• XRCVC worked during the year with like-minded organisations to persuade the Reserve Bank of India to make the newly introduced currency notes accessible.

Education Access

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, which follow.

• The centre collaborated with likeminded stakeholders to start an initiative called Inclusive Stem (I-Stem) comprising a group of young persons who are blind or visually impaired from India pursuing science, technology, engineering and mathematics (STEM)
education and careers. The group aims to be the leading self-advocacy group focused on changing the mind-set, the resource availability and opportunities for the blind and visually impaired to pursue STEM education and careers in India. Building on the previous work of XRCVC members and partner organisations in this area, the group works on different aspects of STEM access, including technical research to enhance maths and science access, outreach to encourage blind students to consider STEM careers, advocacy for more inclusive policies, initiatives to sensitise universities and companies, and development of accessible STEM content. On January 20 and 21, I-Stem organised its first event, a unique hackathon at IIIT Bangalore, in collaboration with EHRC, IIIT Bangalore, Vision Aid, and Vision Empower. The aim was to bust myths about blind programmers and start the process of making the tech industry in India accessible. The hackathon brought blind and visually impaired developers, industry professionals and sighted computer science students together to work on exciting and challenging projects for 24 hours. Not only did participants learn technical skills from the hackathon, but also developed a better understanding of each other’s strengths and weaknesses.

- During the year, the XRCVC was also invited by IIT Kanpur to help their PWD Cell build better accessibility on campus for students with disabilities. A team from XRCVC visited IIT Kanpur in April and May and met with the Dean of Academics, members of the faculty, the Persons with Disabilities Cell, the Chief Medical Officer and students with disabilities on campus. The team also visited labs on the campus and provided inputs on how they could be made accessible. IIT Kanpur is keen to implement the Inclusion Model that has been set up locally by XRCVC at St Xavier’s.

- 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 XRCVC created accessible electronic textbooks, Teaching-Learning Aids (TLAs), and provided conceptual training to these students. In addition, the centre has started creating a TLA resource library for mathematics and science education, starting Std 1 onwards.

- The XRCVC’s Inclusive Education team comprising Neha Trivedi, Calveena D’Sylva, Rebecca Carvalho, and Shizanne D’Mello continued work on 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.

- Ongoing work continued with students who are part of the XRCVC’s comprehensive educational offering. During the year, the centre also regularly conducted training and
sensitisation sessions at Prime Academy, and other institutions like Beacon High School, St John’s Universal ICSE School, and Besant Montessori School.

- Work pertaining to book content creation and accessible study material creation continued through the year. Both staff and volunteers are engaged in this work.
- Ongoing work on Geometry Tools Research for students with visual impairment continued during the year with field testing conducted in different parts of the country.
- Ongoing sessions with the Class 5, Class 8, Class 9, and Class 10 students of Victoria Memorial School for the Blind (VMSB) continued through the academic year 2017-18.
- In June, XRCVC made a presentation at the National Council of Educational Research (NCERT) on:
  - how Visual Concepts are accessed by the blind and low vision students
  - some pointers on things to consider when designing Tactile Diagrams
  - Guidelines for writing Alt Text
  This engagement continued through the year through other programmes as well. For example, in November, Rebecca Carvalho attended an NCERT workshop to create a manual for Upper Primary Science Experiments for Blind and Low Vision students with the Department of Education in Science and Mathematics (DESM). In the same month, she attended a workshop with the Department of Education of Groups with Special Needs (DEGSN) for a project on creating “Guidelines for including Blind and Low Vision students in Science Laboratory activities”.
- In October, Calveena Desylva attended an RCI-approved Continuing Rehabilitation Education (CRE) on ‘Importance of Reading in Education’, related to interventions and possible ways to assist / teach students with Dyslexia. This was followed by another workshop in January 2018 on the ‘Importance of Writing’, related to interventions & possible techniques to assist / teach students with Dysgraphia.
- In December, Neha Trivedi attended a meeting organised by Pratham to submit ideas to the state government on the Inclusive Education Charter.
- During the same month, the XRCVC team had a meeting with a team from a social organisation, Antarang, to explore a pilot project at Govandi related to the need assessment of VI students amongst the community. They also had a meeting with Sol’s Arc school to explore partnerships for a VI model within their rural and Inclusive Education Model.
- In January, XRCVC organised a Transition Planning Workshop for students with Autism, which was conducted by a subject expert, Dr Sushama Nagarkar.
- In the same month, Neha Trivedi followed up for accessibility standards in the GATE 2018 exams and researched DMER for Masters Entrance. XRCVC also actively
advocated with CBSE NEET 2018 authorities to ensure examination provisions to students with blindness who intend to appear for the examination.

- In March, XRCVC facilitated an internship for a student with autism at Brandmela, an event management firm.
- The centre held discussions during the year with faculty members of the BSc-Department of Information Technology, St Xavier’s College, to design and deliver a course on Accessibility for Second Year BSc-IT students.
- The centre also took forward its efforts of having made physiotherapy graduate studies possible, and facilitated guidance and research for two low vision students keen to pursue Masters in Physiotherapy.

Independent Living

Each of us, as we pass through our day, interact with a range of products, environments and services from transport services, to kitchen appliances, and entertainment products. How accessible are these daily living services and products for the visually challenged? The XRCVC’s Independent Living initiative questions and works towards rectifying these areas. Some of the activities covered under this initiative during the year follow:

- The centre conducted ongoing discussions with Assistech, IIT Delhi and Mumbai First about OnBoard, the accessible bus identification and announcement system that will help Visually Impaired persons board public transport buses.
- The centre continued ongoing research and development work on visual / auditory / tactile teaching-learning aids and other independent living aids. Worked on integrating diverse technologies which could create a composite system to read through fingers, see through eyes, or hear through ears. The research also has immense potential for the teaching-learning process as it can promote paired reading and can assist a non-Braille literate person to also function effectively.
- During the year, the XRCVC team met with different travel companies like Enable Travel and BAT travels to discuss areas of mutual collaboration.
- They also held discussions with officials from Polyventure, a company which manufactures of tactile tiles.
- Deliberations continued during the year with Abhyudaya, a social organisation, on creating an accessible campus in IIT Bombay.
- In November, two students from XRCVC, Ganesh Phalke and Nikita Chatterjee, participated in the 4th NCPEDP – Accenture National Convention for Youth with Disabilities (NCYD) in Delhi.
• During the same month, XRCVC, the Department of Ancient Indian History and Culture, and the Argentine Consulate conducted Divya Drishti, an Aroma Painting workshop by acclaimed Argentine painter Pablo Ramirez Arnol.
• A team from the Lotus College of Optometry Juhu visited XRCVC in November to take user feedback on their new low vision device.
• In January, XRCVC organised a focused group brainstorming for the organisation UMOJA, which plans to launch an UMOJA card with benefits for persons with disability.
• The centre also prepared a detailed response to a consultation paper on Making ICT Accessible for PWDs and submitted the same to TRAI.

Creating awareness about the lives and capabilities of visually impaired persons and those with other disabilities is one of the key areas that will open doors for them in a world where the rules are made for and by persons without disabilities. The XRCVC has been working on a number of such initiatives through its mega awareness and sensitisation event Antarchakshu® —The Eye Within. Antarchakshu 2017 was conducted at St Xavier’s College on September 18 and 19. The theme was expanded beyond visual impairment to include other conditions like autism, learning disabilities, etc. There were 1220 participants at the event (mainly staff and students of St Xavier’s College). Some additional interactive workshops related to Antarchakshu like Braille, Treasure Hunt with a Twist, and a Photography workshop — ‘The Blind Way’ were also conducted across different venues inside the college campus, in which around 100 persons participated.

The other awareness activities conducted by XRCVC during the year are appended below:

• During the year, Krishna Warrier from XRCVC and Ketan Kothari from Sightsavers recorded a podcast on the print access movement for an online magazine called ‘Torchlight’. The podcast and its transcript were used in the January 2018 edition of the magazine.
• In November, Dr Taraporevala was interviewed by Radio Udaan for a show focusing on disabled persons.
• In January, XRCVC trained 10 students from SIES College to demonstrate assistive technologies for an awareness program called Embrace the Differences, which was held in the college on January 19 and 20.
Dr Taraporevala delivered a talk on ‘An Inclusive mind-set: A Prerequisite for Effective Leadership’ at St. Xavier’s College. The talk was a part of Harvard College in Asia Program on the theme Redefining Leadership: Initiative and Influence in the Modern World.

In February, Dr Taraporevala and Krishna Warrier made a presentation to the Academic Council of the Xavier’s Institute of Communication; subsequently the XIC management decided to include a course on diversity for all XIC students from the coming academic year.

Dr Taraporevala presented a paper on ‘The Travails of Education and Skill Development’ at the Maharashtra State Level Seminar on Rights of Persons with Disabilities (RPWD) Act, 2016 in March.

During the year different versions of Antarchakshu®, including the sit-down version, were conducted at many places and for a variety of target groups, covering 2195 participants (see Table 3).
Table 3: General Awareness workshops and events (June 2017 – May 2018)

<table>
<thead>
<tr>
<th>No</th>
<th>Date</th>
<th>Participant profile</th>
<th>Venue</th>
<th>No of Participants</th>
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</thead>
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<tr>
<td>1</td>
<td>02-June</td>
<td>Teachers</td>
<td>Children’s Academy School, Mumbai</td>
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<tr>
<td>2</td>
<td>25-July</td>
<td>Media students</td>
<td>Sophia College, Mumbai</td>
<td>21</td>
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<tr>
<td>3</td>
<td>29-July</td>
<td>Media students</td>
<td>St Xavier’s College (autonomous)</td>
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<td>4</td>
<td>2-Aug</td>
<td>Malhar volunteers</td>
<td>St Xavier’s College</td>
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<td>5</td>
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<td>Students</td>
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**Networking**

- In June, Dr. Taraporevala gave a talk on a social justice perspective at Cochin University (Kerala) at a refresher course conducted by the university (CUSAT).
- He also met officials from SRF Foundation and provided inputs on their Inclusion Projects.
- In July, Dr Taraporevala met with Riddhi Shah from Parikrama and discussed potential areas for collaboration concerning independent living for elderly persons and who are visually impaired.
- Teachers from the ETC Centre of Navi Mumbai Municipal Corporation visited XRCVC-Viviana Extension to seek help on how they could set up a resource centre for visually impaired students.
• In December, Dr Taraporevala gave a talk on how to effectively manage and generate positive outcomes from resource centres (The XRCVC Experience) at a Power Breakfast with Leaders and Visionaries along with participants at the Consultative Networking Workshop for Digital Empowerment leading to Livelihood Generation of Persons with Vision Impairment organised by Enable India in Bangalore. There were 75 participants.
• In the same month, he was invited by Wipro as one of the panel members for a discussion about the positive impact of technology accessibility for persons with disability, as part of International Disability Day celebrations.
• Dr Taraporevala also delivered a talk on ‘Dependence to Independence – Making Maharashtra Disabled Friendly’ on the theme of employability at the Indian Merchants Chamber’s Chamber of Commerce and Industry in Mumbai.
• In January, the XRCVC team met with Swati Tribedy and Tanvi Kalekar from Dow Chemicals to explore potential areas for collaboration.
• In the same month, they met with Nixon Joseph from the SBI Foundation to discuss the role of the SBI Centre of Excellence, R&D possibilities, and internship opportunities.

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 Great Eastern CSR Foundation, Tata Capital Housing Finance Limited, Sightsavers, Dhun Pestonji Parakh Discretionary Trust, Tech Mahindra Foundation, Godrej Industries Ltd, SBIMF Funds Management Pvt Ltd, Viviana Mall (Sheth Developers & Realtors India Limited), Executors of the Estate of the late Miss Piloo N Garda, BPCL, Tata Sons Ltd, Rameshchandra H Kumavat, Lions Club of East Bombay, Suryavanshi Ads & Promotions LLP for supporting our various projects.

A big thank you to our large pool of volunteers as well. Their commitment ensures that a small organisation like the XRCVC is able to make a significant contribution and touch the lives of countless people all over the country.

In conclusion, our deep appreciation goes out to St. Xavier’s College—the management, staff members and students, for demonstrating to educational institutes all over the country how a centre of learning can be truly inclusive to persons with disabilities, particularly blind and low-vision persons. Special thanks to Dr Agnelo Menezes, the principal, whose ongoing support and guidance has helped the XRCVC continue as a centre of excellence of national repute.