



Inclusion & Accessibility e-Magazine

VOLUME 2 - ISSUE 2
September - November 2020

**"ROAD TO BUILDING AN
INCLUSIVE & ACCESSIBLE
WORLD : A REALITY CHECK"**
.....



Nitin Gupta
Para-Athlete



Danish Mahajan
Chief Secretary
Radio Udaan

"TOP OF THEIR GAME"
.....

COVER STORY



**SIGN
LANGUAGE
MANTRAS
DECODED**

**COMMUNITY
RADIO**

**SOCIAL
INNOVATOR IN
AUTOMATION &
ASSISTIVE
TECHNOLOGY**

**FEATURED
NGO**

**INCLUSION AND
ACCESSIBILITY
QUIZ & MUCH
MORE**

CONTENTS

VOLUME 2 - ISSUE 2 (September - November 2020)

COVER STORY



Nitin Gupta
Para-Athlete

Experts Speak

(We Asked the Experts to Predict
The I&A Trends 2020)

1. Civil Society Experts
2. Government Disability Expert
3. Inclusion & Accessibility from
the lenses of Young Mind
4. Cover Story
5. Social Innovator &
Entrepreneur in Automation &
Assistive Technology
6. Focus Interview
7. Voice of Disabled: Community
Radio
8. Sign Language Decoded
9. NGO in Spotlight
10. Snippets
11. Quiz

Our Team

EDITOR'S *LETTER*



Namaskar !

Dwelling upon the Philosophy of Antyodaya (Integral Humanism) as proposed by the noted thinker Pt. Deen Dayal Upadhyay ;The philosophy of Integral Humanism is perfectly conducive to the notions of Diversity, Social Equality, Inclusion, Accessibility & Human rights. It means to ensure that the last person, or the the marginalised in the ladder or the chain get the benefits of growth & development.

It is with this ideology and inspiration that the First volume of Inclusion & Accessibility e-Magazine was launched in May 2020 quarter encompassing the proceedings of the first webinar series of the Inclusive growth of PwDs in social & professional arena during COVID-19 Pandemic (21-22 May 2020).

Now it gives us great pleasure to roll out Volume 2 of the I&A e-Magazine for the September 2020 Quarter.

It is pertinent to talk about the recently launched National Education Policy 2020 which is indeed based on the pillars of Access & Equity as mentioned by the worthy Prime Minister Narendra Modi himself. Indian Sign Language (ISL) and its Standardisation is a move advocated in the NEP 2020, that aims to standardize the sign language across the country in National & State study curriculum materials for use by students with Hearing Impairment. But Its successful implementation is entirely based on a strong Awareness Building Mechanism and making the policy accessible for the end-users.

This also coincides with the Global National Sign Language Day celebrated in India on 23rd September 2020 for the first time by the Present Government through a virtual platform further strengthening the cause of Inclusion of all & Access for all.

The need of the hour is to break all the barriers for Inclusion & Accessibility through innovative ways & harnessing the Advanced technology for the same. This calls for increased emphasis on building awareness amongst academicians, researchers ,system developers & end users through workshops, seminars & conferences for bridging the Language & Speech Barrier for the Persons With Disability & Indigenous population.

This would require supporting R&D efforts, deveoping speech tools & technology through application of Artificial Intelligence and disrupting the government & business models.

Speed technology is not reversible hence immense work & research is required by scholars ,academicians, system developers and Technology companies with respect to Indigenous languages to be able to deliver the advantage of Assistive Technology Tools & Aids to one and all.

The current issue of the e-Magazine “Road to building Inclusive & Accessible World: A Reality Check” brings forth the stories of the common people who are at the top of their game by defying their disabilities & limitations to build not only a better future for themselves but for the society as well- Mr.Danish Mahajan, Mr Nitin Gupta & Ms Mudita Jagota are our Heroes and we have made a humble attempt to provide you a glimpse into their life philosophy.

There are many more real life heroes meaningfully contributing to the society but have not been featured here in the magazine due to the practical constraints but our appreciation & best wishes are surely with them & we strive to provide platform to them in our upcoming issues.

My sincere thanks to Mr Santosh Gupta, Shri Sanjay Kant Prasad & Mr Akhil Paul for showing their interest in the e-Magazine & contributing a piece respectively to facilitate the wave of Inclusion & Accessibility. The contributions from Ms Shweta Arya, Mr Rahul Chikara & our very own student Ms Lakshita Verma echoes the socially responsive thinking & innovative solutions that the youth of our country is capable of providing in line with Global Sustainable Development Goals (SDGs).

Special feature on the Trestle labs (Mr Abhishek Baghel) & the NGO Saksham (Ashima Phadiyal) in focus would be of interest to the readers. Ms. Renuka V.N. has made a wonderful contribution by decoding the Sign Language Mantras for the beginners.

The Quiz, the Interview and the snippets highlighting some latest trends pertaining to study -courses, books, assistive technology tools etc is an attempt to showcase the Inclusion & Accessibility ‘Sentiment’ building in the society with an incredible pace.

The editorial team invites suggestions & feedback for further improvisation of the I&A e-Magazine to editorssgargemagazine@gmail.com

Until next time – HAPPY READING!!!!

Prof (Dr) Shalini Garg
Editor-in-chief
I & A e-magazine

Place -Delhi

Date - 29th September 2020



Tap the icons to connect with us

Experts speak

We Asked

**The Experts To Predict
The Inclusion & Accessibility
Trends 2020**



CIVIL SOCIETY EXPERTS

Antyodaya Shiksha Preraks: A call for Action to reach the Last Child



Santosh Gupta
CEO, ISRN

The COVID-19 pandemic has brought with it a plethora of unforeseen challenges. The implications of the ensuing lockdown are bound to have a lasting impact on various domains, particularly on the education sector. As states across the country have been forced to shut down schools and educational institutions to prevent the spread of the Coronavirus.

Uncertainties surrounding the situation have reportedly impacted more than 32 crore students in India as per UNESCO Report. The Remote Learning Reachability Report launched recently by UNICEF outlines that the covid19 pandemic impacted over 286 million (28.6 crore) schoolchildren as 15 lakhs schools were shut in India and majority of them could not access to online learning due to rural urban digital divide, of which 49% are girls.

Taking inspiration from the philosophy of 'Antyodaya- upliftment of the last person' as propounded by Pt. Deen Dayal Upadhyay, 'Antyodaya Shiksha Preraks' is a call to action initiative by ISRN, addressed to active and sensitive citizenry of India to ridge the accessibility gap towards education delivery and provide joyful learning to the last child of India. Through this call, educated and driven citizens (retired, Home makers, Youth) could get involved in delivering bridge course to the students who have been affected due to shutting of schools and lack of technology access and contribute towards ensuring continuity of education to the most deprived children including children with physical disabilities as they have been most hit by the pandemic with even less emotional and social support.



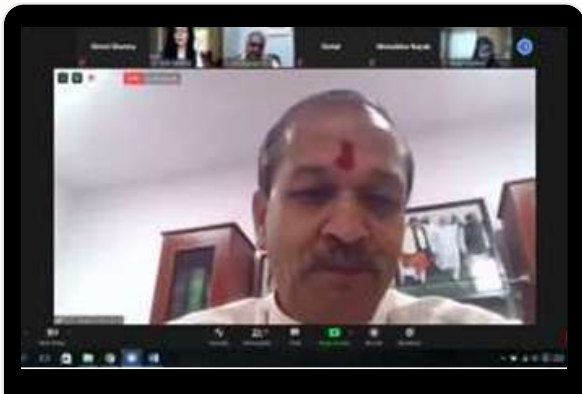
In the above context, ISRN launched the campaign “Reaching out to the Last Child with Antyodaya Shiksha Prerak” on 25th September 2020 which also marks the 104th Birth Anniversary of Pt. Deen Dayal Upadhyaya, the visionary of India who propounded the philosophy of ‘Antyodaya- the upliftment of the last person’. The launch program was graced by the presence of Hon’ble Cabinet Minister, Sh. Om Prakash Sakhlecha, MP Government. Eminent speakers from education background Sh. B. L. Bagra, CEO, Ekal Vidyalaya; Sh. Gopal Arya, National Convener, RSS; Sh. Kiran DM, CEO, ONGC Foundation; Major Harsh Kumar, Secretary, NCERT; Sh. Shivkumar, National Secretary, Vidya Bharti shared their insights and valuable suggestions to motivate the preraks who came forward for the cause. Following the launch, an orientation program for Antyodaya Shiksha Preraks was organized on 26th September where the process of the intervention along with the pedagogical inputs, sustaining the activities at grassroots with precautionary measures of COVID-19 to be followed were explained by the Resource Persons.

The objectives behind the intervention is to deliver supporting education through bridge courses at the doorstep of children (including children with disability) in the rural areas/deprived children in underserved communities with the help of driven citizens. In just few days of this call, we have received registration from 120+ Individual, 25+ Organizations to be part of this campaign across 20 states of India.

We intend to enroll 300 Antyodaya Shiksha Preraks across India for a minimum duration of 3 months, catering to 12,000 most deprived children from rural India/underserved communities in the first phase of this Call to Action initiative. These Antyodaya Fellows will be provided with basic training/ mentoring guidelines on grade based bridging course, assessment and general guidelines and will be facilitated with kits to support teaching learning process.

This call to action campaign will enable child to attain fundamental skills of learning and bridge the education gap amid the pandemic. ISRN appeals to everyone who are interested and can devote some time and be a part of this initiative, can register as Antyodaya Shiksha Preraks till 05th October 2020.

Link: <https://docs.google.com/forms/d/1zn-mDkIb8BMveQJUZRCA5wqDB2cvqyIV8loMYsf1Yfc/edit>



Curriculum Adaptation for Children with Deaf blindness in Inclusive Education



Akhil Paul

Director, Sense International
India

● INTRODUCTION

Teaching is probably one of the very few professions which bring teachers in contact with the varied and diverse range of children except those children who have different learning characteristics due to their cognitive, sensory, physical or psychological challenges. And with the increased focus on 'inclusive education'.

All these children with 'specific learning needs' are now being enrolled in their neighbourhood schools so the teachers in these schools are being exposed to much wider range of children. In any education system, the curriculum is one of the major tool to facilitate the growth of more inclusive system.

Curriculum is often unable to meet the needs of a wide range of different students, especially children with deafblindness. In many contexts, the curriculum is centrally designed, leaving little flexibility for local adaptations or for teachers to experiment and try out new approaches. The content might be distant to the reality in which the students live, and therefore it becomes inaccessible and demotivating. With the implementation of Right to Education Act and Sarva Shiksha Abhiyan, inclusion of students who are deafblind in a typical classroom presents a wide variety of needs, abilities and poses major questions regarding the development of appropriate curricula and instructional strategies.

The Teachers and parents have raised concerns about successful adaptation of both content and teaching methodologies in general education for students with deafblindness who do not gather and access ongoing information in a traditional manner i.e. by seeing or listening.

However, when we are planning for inclusive education, the student with deafblindness/ Multi Sensory Impairment (MSI) must be provided with an opportunity to be an active participant in the class in ways that are individualized to reflect his or her particular learning needs and IEP goals.

For inclusive education, it should be ensured that the same curriculum be followed for children with and without disabilities, but with adaptations like small changes in learning content, learning inducing environment, appropriate learning approach, adaptation in learning aids/ TLMs, flexibility in evaluation, etc. It would be important to provide text books and curriculum in accessible formats for children with deafblindness.

Adapting a curriculum which is inclusive of all learners may involve broadening of current definitions of learning. Inclusion in a typical classroom of students who are deafblind and who themselves represent a wide variety of abilities and needs, presents major questions regarding the development of appropriate curricula and instructional strategies. Concerns arise about successful adaptation of both content and teaching methodologies in general education for people with deafblindness who do not gather and access ongoing information in a traditional manner.

Deafblindness is a unique disability- a combination of visual and hearing impairment. Though the degree of deafness or blindness varies, the combination of dual sensory loss leads to unique problems in an individual's communication, mobility and their ability to access information. Deafblindness is a low incidence disability and is hidden in community.

As defined in the Right of Persons with Disabilities Act, 2016, 'Deafblindness is a condition in which a person may have a combination of hearing and visual impairments causing severe communication, developmental, and educational needs'. The term deafblind refers to vision as well as hearing loss and is also known as dual sensory impairment. It may seem that term deafblindness refers to a total inability to see or hear but, very few children identified as deafblind are totally deaf and totally blind, although some are. Most of the children diagnosed as deafblind have some useful vision and/or hearing, which can be used for providing education. Because deafblindness is a combination of vision and hearing losses, there are as many possible combinations as there are individuals. For this reason, no two children with deafblindness are alike.

The condition of deafblindness, impacts overall development of the child. Children with combination of visual and hearing impairment have limited opportunity to learn and acquire concepts seeing and moving around in the environment. Their learning also gets affected due to lack of or limited interaction with family members. Since what we learn, 94% comes from vision and hearing, children with deafblindness face major difficulties in communication, social skills, movement, access to information, independent living to mention some. There is no data available regarding the size of the deafblind population in India due to lack of a comprehensive study or research to determine the true incidence. Estimates, based on information gathered from community based projects, indicate that there could be more than 500,000 deafblind/ Multi Sensory Impaired persons in the country.

Sense International (India) was established in 1997 as the first national NGO in India to support the development of comprehensive services for deafblind people. Sense International (India) supports local organisations to develop sustainable services for deafblind people. Today Sense India works with 57 partners in 23 states providing services to more than 71,500 deafblind people. Our Key achievements include: deafblindness now officially recognised by the National Trust, Government of India; a dedicated Deafblind Teacher Training Programme; a national resource and information centre on deafblindness has been established and networks of families and teachers and deafblind people have been established.

The Sense International India Approach of Curriculum Adaptation for Students with Deafblindness

There are almost 59,000 children with deafblindness enrolled into the Sarva Shiksha Abhiyan (now Samagra Shiksha) programme of Government of India (SII, 2015). However, majority of them are not able to access classroom education and are confined to home-based education due to various systemic factors associated with education system. Among all factors that hinders their access to classroom education, lack of capacity of teachers to teach children with deafblindness/MSI (using the same curriculum used by sighted- hearing children) is a major barrier.

Understanding this challenge, Sense International India developed a two pronged approach - first, training of teachers of mainstream education system to build their capacity to teach a child with deafblindness/MSI in the same classroom with sighted-hearing peers; and second, working on curriculum adaptations i.e. adapting the regular classroom text books for students with deafblindness. Sense International India has strongly advocated for equal rights for education for children with deafblindness/MSI and has trained more than 3300 teachers of mainstream education system so far through its interventions (SII, 2015).

In addition, Sense India have been providing consultancy training to SSA and trained their Master trainers on 'deafblind education' to further train their teachers. As of now Sense India have been successful in providing training to SSA Master Trainers in the state of Assam (70 participants), and Haryana (105 participants).

The strategy of curriculum adaptation is complementing the strategy of providing training to the teachers to attain the goals of inclusive education for children with deafblindness/MSI.

The curriculum adaptation approach laid its foundations on this line of enquiry:

- Is 'learning' happening for the children with deafblindness/MSI in the schools?
- Does School understand 'deafblindness'?
- No two children are same and has wide variety of abilities and needs,
- Children must be an active participant in the classroom,
- Individualized Educational Plans (IEPs) need to be implemented and accommodated, and
- Same curriculum to be followed for children with and without special needs.

The founding principles of approach were adapted from the "**Tools for Teachers on Curriculum Modifications and Adaptations**" compiled by the New Jersey Council on Developmental Disabilities (2014) and NCERT National Curriculum Framework (2005). The "Tools for Teachers" was selected as it provided basic information and guidance in demonstrated best practice strategies for including students with disabilities in general education settings.

For Curriculum adaptation specifically, the principles of nine types of adaptations by Ebeling & colleagues (1994) were used which are as follows:

- Input: Adapting the way the instruction is delivered to the learner (such as using different visual/ tactual aids).
- Output: Adapting how the learner might respond to instruction (such as allowing a verbal/ tactual, instead of written response).
- Time: Adapting the time allotted for learning, task completion, or testing (such as increasing or decreasing time given for tasks).
- Difficulty: Adapting the skill level, problem type, or rules on how the learner might do the work (such as simplifying directions).
- Level of Support: Increase the amount of personal assistance for a specific learner (such as assigning peer tutors/ classroom assistants).

- Degree of Participation: Adapting how much the student will be involved in an activity (such as having the student write answers on the board/ use objects).
- Alternate Goals: Adapting the goals or outcomes expectations while using the same materials (such as asking the student to be able to recall book titles instead of recalling both book and author names).
- Substitute Curriculum: Providing different instruction and materials to meet a learner's individual goals (such as asking a student to read the graphic version of a text instead of the entire novel).

Sense International India incepted and implemented a phase-wise action plan to adapt the curriculum for children with deafblindness/MSI in regular classroom. The action plan is as follows:

Phase Action Timeline

- Phase 1** Formation of a Core group to develop a strategic plan of action on curriculum adaptation for children with deafblindness/MSI 30th March 2015.
- Phase 2** Adaptation of NCERT books (primary level) on four different subjects following curriculum adaptation approach 1st Apr–16th May 2015.
- Phase 3** Organizing a Consultative workshop for review of adapted chapters of four different subjects 20th – 22nd May 2015.
- Phase 4** Development of Handbook on “Curriculum adaptation for children with deafblindness/MSI under Inclusive education’ November 2016.
- Phase 1** A Core group of 14 senior professionals (members from the government department, education specialists/senior professionals in the field of deafblindness, lead social worker, and programme team staff from Sense International India) was set up in year 2015 to develop the action plan and monitor its implementation.

The specific objectives of the Core group were:

- To develop adaptation in regular curriculum - learning content, learning approach, learning aids and evaluation process;
- To develop and design an inclusive classroom with an adaptive environment;

- To develop teaching approaches and use of teaching learning materials (TLMs) required in a class room; and
- To develop a tool to understand the level of a child and provide appropriate need based adaptations and educational intervention.

The members of the Core group focussed on developing methods to adapt curriculum for children with deafblindness/MSI in inclusive education set up (up to primary level), ensuring its implementation, and reviewing its progress against the overall aim and specific objectives as detailed within the Curriculum adaptation approach.

Phase 2 The Core group members were divided into four groups to adapt NCERT books (up to primary level) on four different subjects – English, Hindi, Mathematics, and Environmental Studies (EVS) following curriculum adaptation approach. The principles of curriculum adaptation by NJCDD (2014) and National Curriculum Framework 2005 were the guiding framework in the development of the adapted chapters in the four subjects.

Following steps were taken by the group members while adapting the curriculum:

1. Selection of the subject area (and grade level) to be taught;
2. Selection of the lesson topic to be taught (on one day);
3. Identification of the curricular goal for most learners;
4. Identification of the instructional plan for most learners;
5. Identification of the learner(s) with deafblindness/MSI who will need adaptations in the curriculum plan;
6. Use of “Nine Types of Adaptations” as a means of thinking about some of the ways one could adapt what or how one teach to accommodate the learner with deafblindness/MSI in the classroom for this lesson.

Each group members worked on their respective subjects and came up with four to five adapted chapters out of books of each class I to V. These adapted chapters were later reviewed by senior professionals in the field of deafblind education for their suggestions.

Phase 3 Sense International India organized a consultative three days' workshop on 'Curriculum adaptation for children with deafblindness/MSI under Inclusive education'. The main purpose of this workshop was to present the adapted curriculum and consult special educators/teachers working with the children with deafblindness/MSI in special/mainstream schools and get their inputs/suggestions. Participants of the three days' workshop were thirty special educators having knowledge on deafblindness along with practicing teachers from mainstream school and government school/sectors. Major methods used in training were theoretical inputs, audio-visual, success stories, practical, and group discussions.

The expected outcomes of the workshop were:

- An appropriate curriculum to ensure inclusive education for children with deafblindness/ MSI, which will enable them to learn effectively and participate equally in the class.
- The workshop will build the capacity of mainstream teachers and schools as well to enhance their level of understanding and skills. Mainstream school teachers will be able to follow the curriculum in an inclusive environment for children with deafblindness/ MSI
- Teaching strategies and TLM will be designed and adapted as per the need of an individual child with deafblindness/ MSI enrolled under Inclusive education.

The suggestions/inputs of the participants in consultation helped to develop an appropriate module for children with deafblindness/MSI in an inclusive education

Phase 4 The Core group worked on the suggestions obtained and finally developed a Handbook on "Curriculum adaptation for children with deafblindness/MSI under Inclusive education'. The content of the book are as follows:

Content of the handbook:

- Chapter 1: Deafblindness and its impact on learning.
- Chapter 2: Specific approaches, specific considerations, and suggestion for including children with deafblindness/MSI.
- Chapter 3: Principles of curriculum adaptation in inclusive class room and education.
- Chapter 4: Creating an inclusive classroom for all including children with deafblindness/MSI.
- Chapter 5: Addressing accessibility issues and providing reasonable accommodation to children with deafblindness/MSI.

This handbook is the culmination of the efforts on the content development of curriculum adaptation for children with deafblindness/MSI in regular classroom. This book has the potential to be used as a capacity building tool for teachers in mainstream schools. The book uses a bottom-up approach and elicits simple tips/techniques which can be used without altering the learning outcomes of the each chapters in regular classroom curriculum. It provides a guiding tool in decision making for curriculum adaptation by the teachers while working with children with deafblindness/MSI in an inclusive classroom.

● **Key challenges in implementation and suggestions for practice:**

The implementation of curriculum adaptation of regular classroom books (suited to the learning needs of children with deafblindness/MSI) has its own inherent challenges. Some of the key challenges and possible suggestions to overcome it are described below:

Educational Policies – Albeit the deprivations faced by children with disabilities are violations of their right to education and the principle of equity, educational policies at macro (national/state legislations) or micro (school) level are still not practicing inclusion when it comes to cater to the needs of children with complex disability such as deafblindness/MSI. Children with disabilities encounter different forms of exclusion depending on factors such as the type of disability they have, where they live and the culture or class to which they belong (UNICEF, 2013). Hence, institutional policies related to curriculum adaptation may have to open and flexible to embrace this idea of curriculum adaptation suited to the needs/learning abilities of diverse populations such as children with deafblindness/MSI in the same classroom.

Heterogeneous Nature of Disability – Individuals with deafblindness/MSI present a range of varying needs and varying abilities in terms of their learning. This variation is based on the type, level and onset of impairment, time of language acquisition, and degree of vision/hearing loss (Ask Larsen & Damen, 2014; Dammeyer, 2014; Hersh, 2013). This heterogeneous nature of disability will pose challenges for the teachers in educating the child. Hence, to overcome this challenge, it is suggested that teacher use the handbook to learn tips/techniques and be creative while teaching the child with deafblindness/MSI in same classroom.

Communication modes – Individuals with deafblindness/MSI have diverse communication needs based on the type, level and onset of impairment, their skills,

and the contextual factors (Hersh, 2013). The most common communication approaches used by them include Braille, speech, sign/tactile sign language, Tadoma, and tactile alphabets and each of these modes require specific training. Hence, it is suggested for teachers and school staff to undergo training on the communication modes in order to communicate with the child with deafblindness/MSI. Communication itself will be key instrumental in facilitating the learning of the child in the classroom. Classroom Assistants can be trained to work on one-on-one individual basis with the child in the regular classroom.

Interference in peer's learning – It is a common understanding that teaching a child with disability in regular classroom will be time consuming and may interfere with learning of non-disabled peers. However, evidence suggests that inclusive education practices not only facilitate the learning of a child with disability but also maximizes the learning of child without disability (UNICEF, 2013). Disability inclusion could lead to a greater acceptance, more aware, inclusive and accessible society for all (Rohwerder, 2015). Working to teach child with deafblindness/MSI in the classroom may require more preparation on part of the instructor to ensure that the education of child without disability is not affected on the cost of education of child with complex disability (such as deafblindness/MSI) in the same classroom. This handbook provide some guiding tools on the type of adaptation and supports needed in place to teach all children with diverse learning needs and abilities.

Decision on which curriculum portion to be trimmed – Keeping in mind the learning objective of the chapter, various adaptations are possible (following the principles/types of curriculum adaptation), suiting to the needs of child with deafblindness/MSI and over all students of the classroom. The content of the curriculum can be trimmed depending on the time for preparation and class execution, and support resources available from the school, without compromising the learning objectives of the class.

● **Conclusion**

The World Report on Disability (2011) suggest that inclusive education is effective and beneficial for all learners (WHO & World Bank, 2011). To attain goals of inclusive education as prescribed in UNCRPD (2006), all the stakeholders of education system have to come together to bridge the gaps in the system to ensure every child, irrespective of the abilities/needs, is able to attain education in the same classroom along with their non-disabled peers with dignity and equitable access to education. Inclusive education requires flexibility in educational approach in terms of school organization, curriculum development and pupil assessment.

Such flexibility would allow for the development of a more inclusive pedagogy which embrace diverse learning styles.

Curriculum adaptations can be a powerful tool to complement the capacity building initiatives for the teachers to educate students with diverse learning needs. It is also important to correlate curriculum adaptations with the IEPs, meeting the student's needs as identified on

IEP of each child. Sense International India developed the handbook on curriculum adaptation for children with deafblindness/MSI keeping in mind the learning needs of the children with deafblindness/MSI. The handbook has the potential to be used as a capacity building tool for teachers in mainstream schools. This handbook is apt on time in consideration of the fact that deafblindness is now recognized in the disability legislation of the country in the recently enacted "The Rights of Persons with Disabilities Act 2016". This curriculum adaptation approach developed by Sense International India will pave the way for future research in the field of deafblind education and development of educational strategies for inclusion of these children with unique condition.

Deafblindness creates more difficulties in the life of children by limiting their movement and ability to learn, explore and express themselves in their immediate environment. These limitations affect the child's educational needs and they are mostly deprived of getting education in the mainstream education.

Curriculum adaptation for children with deafblindness/ MSI will involve making necessary changes in learning content such as **modification, substitution/ replacement, omission as a last resort, compensation etc., without changing the learning purpose.** Keeping the children with deafblindness/MSI in mind while adapting the curriculum, small changes in learning content, learning friendly environment, appropriate learning approach, adaptation in learning aid and evaluation should be adapted.

In February 2015, Sense India organized 3 day workshop on 'Curriculum adaptation for children with deafblindness/ MSI under Inclusive education' with the aim to develop a mechanism to adapt the regular curriculum for children with deafblindness in regular classroom.

The contents of this document aims to enable teachers to adapt and modify classroom curriculum as per the needs and abilities of children with deafblindness. It would also increase the number of regular teachers in mainstream schools to work effectively with children with deafblindness.

Through this 'adapted curriculum' we aim to provide quality education to children with deafblindness/ MSI, which will enable them to learn effectively and participate equally in the class. It will also maintain the dignity and build their confidence to learn. Further it will build the capacity of mainstream teachers and schools as well to enhance their level of understanding and skills.

We, at Sense India are pleased to offer this publication to the teachers in the schools which have open doors of knowledge for deafblind/ MSI children and hope that the sample adaptations in this publication will motivate them to make needs based adaptations for students in the classroom.

Government Disability Expert

Special features and important terminology used in RPwD Act 2016: An Overview



Dr. Sanjay Kant Prasad

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The Rights of Persons with Disabilities Act 2016 is an Act to give effect to the United Nations Conventions of Rights of Persons with Disabilities. It is socially relevant Act for realising the principles of UNCRPD for the empowerment of persons with disabilities.

These principles include (a) respect for inherent dignity (b) non-discrimination (c) full and effective participation and inclusion in society (d) respect for difference and acceptance of persons with disability.

(e) equality of opportunity (f) accessibility (g) equality between men and women (h) respect for the evolving capacities of children with disability and respect for the right of children with disabilities to preserve their identities.

The RPwD Act, 2016 adopts human rights based approach to disability and recognise that persons with disabilities is human diversity like other diversity in the society and enjoy human rights and fundamental freedoms with others in the society.

The RPwD Act, 2016 increases the categorization of persons with disabilities covering 21 conditions including disability caused due to (a) Chronic neurological conditions and (b) Blood disorders.

This Act has several special features, some of these are given in brief as under:-

The strengthening of regulatory monitoring and grievance redressal mechanisms in terms of their nature and function as well as designation of Special Courts at the district and is also constitute special features of this Act.

This Act has provision for representation of persons with disabilities including women with disabilities in the different bodies to be created under this legislation.

The specific provision has been made in this Act for persons with disabilities in the event of natural disaster and humanitarian emergencies.

One of the important special features of this Act is that about certificate of disability issued under section 58 of this Act shall be recognised and valid all over the country. It means persons with disabilities need not to obtain fresh disability certificate if they move from one State to another.

The Act has made provision of time limit for compliance with some of its substantive provisions such as compliance with accessibility norms etc.

It is important that to understand the provisions of the Act for better implementation, it is necessary to be acquainted with the various terminologies used with its simple meaning. Some of the important terminologies with elaborations are given as under:

Person with Disability:

The Act gives a generic definition of a person with disability, and it says: “person with disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.

Specified Disabilities:

A total number of 21 conditions have been listed and defined in the schedule of this Act. These 21 conditions are recognized as specified disabilities. It states that ‘specified disability means the disabilities as specified in the schedule’. These 21 conditions have been broadly categorized and distributed under Physical Disability, Visual Impairment, Hearing Impairment, intellectual disability, Mental Behaviour, disability caused due to (a) Chronic Neurological condition & (b) Blood disorders and multiple disabilities.

Persons with specified disabilities have further been subdivided into two categories, namely, persons with benchmark disabilities; and persons with disabilities having high support needs.

Persons with Benchmark Disability:

‘Person with Benchmark Disability’ means a person with not less than forty percent of a specified disability. Thus, for example, persons with blindness, persons with low vision, and deaf persons and persons who happen to be hard of hearing constitute persons with benchmark disabilities having measurable parameters inbuilt into their respective definitions. In their case, the degree of disability is irrelevant as they fall within the ambit of measurable parameters. On the contrary, persons with locomotor disabilities, for example, do need to have a minimum of forty percent degree of disability since measurable parameters are not in-built into their definitions.

Persons with Disability having high support need:

'Person with Disability having high support needs' means a person with benchmark disability certified under clause [a] of sub-section 2 of section 58 who needs high support. It stipulates that "high support" means an intensive support, physical, psychological and otherwise, which may be required by a person with benchmark disability for daily activities, to take independent and informed decision to access facilities and participating in all areas of life including education, employment, family and community life.

Thus all persons having high support needs are necessarily also persons with benchmark disability; but all persons with benchmark disabilities are not necessarily persons having high support needs.

Discrimination:

"Discrimination" in relation to disability, means any distinction, exclusion, restriction on the basis of disability which is the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field and includes all forms of discrimination and denial of reasonable accommodation.

Barrier:

"Barrier" means any factor including communicational, cultural, economic, environmental, institutional, political, social, attitudinal or structural factors which hampers the equal opportunities and full and effective participation of persons with disabilities in society.

Communication:

"Communication" includes means and formats of communication, languages, display of text, Braille, tactile communication, signs, large print, accessible multimedia, written, audio, video, visual displays, sign language, plain-language, human-reader, augmentative and alternative modes and accessible information and communication technology.

Establishment:

"Establishment" includes a Government establishment and private establishment

Government Establishment: "Government Establishment" means a corporation established by or under a Central Act or State Act or an authority or a body owned or controlled or aided by the Government or a local authority or a Government company as defined in section 2 of the Companies Act, 2013 and includes a Department of the Government..

Private Establishment: “Private Establishment” means a company, firm, cooperative or other society, associations, trust, agency, institution, organization, union, factory or such other establishment as the appropriate Government may, by notification, specify.

Public Building:

“Public Building” means a Government or private building, used or accessed by the public at large, including a building used for educational or vocational purposes, workplace, commercial activities, public utilities, religious, cultural, leisure or recreational activities, medical or health services, law enforcement agencies, reformatories or judicial for as, railway stations or platforms, roadways bus stands or terminus, airports or waterways.

Information and Communication Technology:

“Information and Communication Technology” includes all services and innovations relating to information and communication, including telecom services; web based services, electronic and print services, digital and virtual services.

Public facilities and Services:

“Public Facilities and Services” includes all forms of delivery of services to the public at large, including housing, educational and vocational trainings, employment and career advancement, shopping or marketing, religious, cultural, leisure or recreational, medical, health and rehabilitation, banking, finance and insurance, communication, postal and information, access to justice, public utilities, transportation.

Reasonable Accommodation:

“Reasonable Accommodation” means necessary and appropriate modification and adjustments, without imposing a disproportionate or undue burden in a particular case, to ensure to persons with disabilities the enjoyment or exercise of rights equally with others.

Transportation System:

“Transportation Systems” includes road transport, rail transport, air transport, water transport, para transit systems for the last mile connectivity, road and street infrastructure, etc.

Universal Design:

“Universal Design” means the design of products, environments, programmes and services to be usable by all people to the greatest extent possible, without the need for adaptation or specialized design and shall apply to assistive devices including advanced technologies for particular group of persons with disabilities.



INCLUSION & ACCESSIBILITY : FROM THE LENSES OF THE YOUNG MINDS

Building Inclusive Workplaces



**"Diversity is being invited to the party,
Inclusion is being asked to dance."**

This is a very famous quote by Verna Myers who is an inclusion strategist, thought leader and social commentator. This quote explains D&I clearly and simply in a brilliant way that makes it easier to understand its true meaning

Shweta Arya

Global Talent Development, OLX
Alumni- MBA (Gen)
USMS Batch of 2017-19

Cultivating Diversity and Inclusion

Inclusive teams make better business decisions - up to 87% of the time (Forbes, 2017).

Businesses that understand the importance of diversity in the workplace are known to perform better both financially and culturally. Organisations need to focus on the basics, i.e. the significance and importance of these two words- Diversity and Inclusion and focus on them together.

Diversity & Inclusion is synonymous with Composition & Culture.

Diversity is about the composition of the workforce while Inclusion highlights the culture of the Workplace. When employees work with people from different backgrounds, they have an opportunity to learn from one another and produce higher quality products and services.

An inclusive culture is the key that unlocks the hidden value of a diverse workforce. Having a diverse workplace will also foster a positive working environment in which employees grow and thrive.

Implementing a D&I strategy

It is extremely important to set the tone and making the workforce aware about –
Why is there a D&I initiative?

For example, at OLX Group with global teams, 70+ nationalities the employees are ambassadors for promoting D&I at workplace. Forming a 'Global D&I Council' with senior leaders and specific work streams around hiring, engagement, rewards is the very basic yet essential step to steer ahead. It is important because it is the right thing to do and is one big opportunity to make us stronger as an organisation.

It is preeminent to create a D&I mission and scope that resonates with your organisational strategy. A one-size-fits-all approach might get you started but for employees to incorporate it in their behaviours and their work, it is important that your D&I scope is unique, honest and possesses as high degree of relevance with your 'core company values'

Diversity research by McKinsey (2014) on 366 companies reveals that companies in the top quartile for gender and ethnic diversity are 15% and 35% more likely to have better financial returns vs industry median.

Such insights are eye-openers and help start conversations around the importance of inclusive practices. D&I communication and awareness should not be limited to the HRDs (Human Resources), rather a D&I group or committee should be open to all employees to participate and share ideas.

Corporate World for PwDs

Overall, 2.21% of Indian population has one or the other kind of disability. (Ministry of Home Affairs, GOI)

Person with disabilities (PwD) are individuals with families, jobs, hobbies, likes & dislikes, problems, and joys. While the disability is an integral part of who they are, it alone does not define them. Both employees with and without disabilities benefit equally from a diverse work setting. By working alongside employees with disabilities, employees tend to consider things they had never thought of before, such as the accessibility challenges and new, creative, and collaborative ways of working.

It is crucial to Identify job positions suitable for PwD candidates by conducting a thorough job analysis. Companies with their dedicated recruiting practices (LinkedIn, at college career fairs, etc.), are now also utilizing channel that have proven quite effective and also lead to a higher candidate turnout. One such channel is - NGOs/ Resource groups.

These organisations are working to provide employment opportunities as well as skills and competence training to a diverse pool of PwD candidates (locomotive disabilities, speech and hearing impairment, intellectual disabilities etc.) for better employment opportunities and a secured future. Creating awareness in the organization for the employment of diverse people is another extremely important step. One of the biggest challenges in employing people with varied capabilities is the attitude of co-workers. They can either be too cautious or not accepting at all. As part of the diversity initiatives, organizations need to run educational and sensitization programs that focus on appropriate behaviour and communication with PwD candidates. Complete acceptance, equality should form the basis of all training programs.

“Do not make them into disability heroes or victims, treat them as individuals first, similar to your other colleagues”

At OLX India, we have adopted a similar approach with recruitment channels and partnering with NGOs working in this sphere to provide us with the right pool of candidates. Before onboarding, there were two sets of training- an induction training for the PwD candidates and a sensitivity training for the teams as well as the support staff interacting with them on day to day basis. We also shared a handy guide with all employees called ‘How can we be Inclusive’?

Another initiative is - specific programs on awareness of 'Unconscious Bias's during hiring and in the workplace. Keeping in mind the need for employee and gender sensitisation, we have covered 100% of our talent through interactive training formats such as theatre- based workshops to help them understand how to address any bias and harassment issues.

Organizations should also focus on revamping the office with accommodations required by law for employing PwD candidates, such as entry and exit ramps for wheelchairs, doors that will open with a switch, smooth passage inside the buildings, Accessible Restrooms and so on.

Post Covid-19 pandemic, the entire world is now working remotely, and organizations are witnessing that working from home makes work more accessible to all. A Forbes article published in April'20 mentioned how “working from home opens the door to employing people with disabilities”.

Organizations should continue this path of Diversity and Inclusion and encourage the workforce to be open and empower talent to be aware of their biases in order to embrace diversity, inclusion, and equity.

Accessibility in Sports Equal & Equitable participation of Para Athletes



Rahul Chikkara

Programme Manager & OSD to
CEO, Sai National Centre of
Excellence, Rohtak

● Purpose /Abstract

The article aims at exploring the inclusion of Persons with Disabilities (PwD) in sports.

It is an attempt to know the facilities provided to them such as accessibility of sports institutions/academies, architectural designs/infrastructure, training equipment, coaching & quality, quality of field of play, general living conditions, nutritional/dietary requirement, doctors and physiotherapists specially trained to assist them,

● Introduction/Problem

Sports and games are an integral part of human life and important for human resources development. They are also an effective way to channelise the energy of youth in productive and meaningful purposes. Sport opportunities for disabled-bodied individuals have significantly increased in recent decades; we have seen increasing opportunities for enhanced training and competition at various levels.

In a country like India where we have a large number of specially abled people and numerous diversities, para athletes should be normal. The term “para-athlete” is an umbrella term used to encompass all individuals with limited functionality. They are classified into different categories such as impairment in the arms and legs, limited function in lower and upper limbs, athletes compete from a wheelchair etc. in order to compete in a game they need assistive equipments like wheelchairs, stools, prosthesis, bow bandage, assistant etc

For instance, a para-archery athlete may play from a wheelchair or may have any impairment in the body. Hence, the facilities should be exclusively designed to suit their needs.

● **Solution** **Diverse Sport Development Needs**

Physical infrastructure of sports facility dedicated wholly to para sports is a special consideration. For entry/exit points, car parking, and galleries. Corridors and staircases with non slip strips and visual markings, and ramps with appropriate dimensions such as length, breadth, height. Hand Railing on both sides of staircases, restrooms, changing facilities, easy access to buildings like hostels, mess etc.

Design of FOP is also essential for them to practice. Here the notable thing is that some structures are permanently constructed like ramps but some are not. Hence, a sports facility must have a backup of materials needed to make temporary structures.

The **therapeutic activities** like sauna, masseur service, physiotherapy all should be sorted out accordingly. Providing diagrams and/or written pre-race information for athletes who are hearing-impaired.

Psychosocial behavior is yet another measure to ensure their inclusivity. Language is continually evolving hence, it should be carefully used to describe para- athletes, must be sensitive and appropriate, and acceptable to the individual or group concerned. There is huge demand for specialized coaching for para athletes as their requirements are different.

● **Evaluation**

To summarise the inclusion of para athletes more we need to pay attention to participation, motivations and their goals, mental imagery of a para athlete, stress coping mechanisms, personality development, attitudes towards other disabled-bodied athlete groups, knowledge and attitudes towards doping as para sports are not exempt from it, transitions to retirement and later life. Awareness and recognition through national awards should also be priority.

Characteristics of Civil Engineering/architectural guidelines:

- Washrooms
- Shower rooms
- Sauna
- Masseur facility
- Physiotherapy
- Adaptive Clothing, sports kit
- Accessible gym equipment

Addressing Disability With Mental Revolution - Take Of A Young Socially Responsive MBA Graduate



Lakshita Verma
Student, USMS

In these unprecedented times of COVID-19, our way of living life has been continuously evolving, which has affected People with Disability the most. First of all, Disability is not their identity. For long, Disabled people have been viewed merely as 'objects of sympathy and charity'. It is ability that matters and not Disability (which is just a matter of perception). Disability doesn't mean one cannot live the life they dream of. Dreaming is important.

As you dream more, you materialize more. And once you know better, you can achieve all that you dream and desire. Billions in world population are Disabled, yet represent world's largest minority. Here, interesting fact is that minority have a mindset of Granularity instead of superficiality. This renders them exceptionally creative in the way they work. The physical & intellectual difference between persons with & without Disability does not make them any less of a human and thus, deserve equal rights.

Baked in the apparatus of our Institutions is the belief that Disabled people are incapable and unworthy. This leads to the triage thinking that once we have taken care of everyone & everything, we will offer you a little of what's left. This destructive mindset cannot be solely solved on the basis of research and data. It must be addressed on a scale similar to #MeToo, #BlackLivesMatter movements. To move forward on disability rights, we must first unify the disability movement which shall generate popular support. Societal Awareness is the need of the hour. Society desires that PwDs fit into the societal structure, rather than structures fitting into the PwDs needs. Wide range of Assistive services are needed for them. We, the youth of India, dream of a Nation where Accessibility and Inclusion are No more challenges to be met. Lastly, I would say- "Believe you can, and you're halfway there."



Cover Story

INSPIRING STORY OF A WHEEL CHAIR BORNE NATIONAL LEVEL PARA ATHLETE , FITNESS FREAK & A WHEEL CHAIR MODEL MAKING IT BIG



Nitin Gupta

National Level Para Athlete

My Name is Nitin Gupta, and I am from Meerut Uttarpradesh a city in the National Capital Region. I am a Roll- Model (no pun intended!) and a National level para-athletic (Basketball, Rugby and Cricket) player, a fitness freak and Wheel Chair Model. In 2010, I met with a fatal accident causing serious Spinal Cord Injury. As a result my lower limbs were paralyzed & I had to be bedridden for a couple of years.

NEVER SAY DIE SPIRIT :

I was not ready to accept this passive life style causing pain to people around me who were really disturbed to see me in this miserable state & were worried about my future. Hence gathering all my will power I slowly started making small movements with support & assistance of my family members.

But I must admit that it was not an easy job as these little body movements made me face a lot of discomfort & pain along with mental agony. The depressing thoughts of becoming dependent forever & not being able to fulfill my life goals set for myself & society before the accident were enough to dampen my spirits & to accept my bedridden future for the rest of my life.

DISABILITY TRANSFORMED TO ABILITY : Turning Point

It was my self determination & continuous unconditional love & relentless support from the family especially my parents that I could first bravely fight with the depression for a really long time and later pulled myself up from the passive & highly dependent life state to a future full of self driven positivity & achievements forging ahead to never look behind.

The life changed when I observed on news channels & social media about lots & lots of people suffering with different disabilities and doing well in their life too. This inspiring awareness & taking cue from the normal life being led by the people suffering from the similar Spinal Cord Injury led disability my life took a U Turn for the best .Today, I have marked my name as an achiever in National Para Athletics, National Wheelchair (basketball, cricket, rugby) Sports; and I am also pursuing my dream of being on the the ramp as a Model in wheelchair!

ASSISTIVE TECHNOLOGY GAVE WINGS :

In my zest to reach out to the world like I used to before that fatal accident ,I started moving around on a self operated wheel chair which gave only limited access.But the real time mobility & access increased manifolds when my dream of being able to use Ottobock wheel chair came to reality.

Today a being a proud user of Ottobock Motus Active wheelchair I have fulfilled my previously unattainable goals and will surely help me in achieving new dreams & ambitions centred around not only myself but many SCL injury based Persons With Disability for whom I make special efforts to arrange inspirational dialogues , forums and platforms to exhibit their talents.

With these words 'LIFE ISN'T ABOUT FINDING YOURSELF ITS ABOUT CREATING YOURSELF' I would like sign off requesting all my friends and readers to stay safe & fit during this Covid 19 Pandemic.

SNAPSHOT OF NITIN GUPTA'S ACCOLADES:

● Achievements

- Being a SCI Patient (Spinal Cord Injury), Wheel Chair User, I am a gold and silver medallist in U.P. State
- Para-Athlete
- Social worker and help disabled people

● Awards

- Delhi Ratan Awards
- Divang Ratan Awards' the Legend Neta Ji Subhash Chand Boss words,
- Meerut Ratan Awards
- Ehsaas Hind Award
- 3 more Awards



SOCIAL INNOVATOR & ENTREPRENEUR IN AUTOMATION & ASSISTIVE TECHNOLOGY

SELF NARRATED INNOVATION JOURNEY



Abhishek Baghel

FOUNDER – Trestle Labs

Abhishek is a social innovator and entrepreneur. His journey from the experiments to innovations and entrepreneurship has been a tremendous one. He is an experimentalist who loves to work in the automation and assistive technology sector.

As a technology enthusiast, I have worked in the field of Electronics, Image Processing, Mobile Computing and Machine Learning. I keep on working towards combining synergy of different technologies in the existing and the futuristic solutions to deliver sustainable impact in the lives of citizens. He holds a degree in Instrumentation and Control Engineering from GGSIPU Delhi.

<https://www.linkedin.com/in/abhishekbaghel>

About Trestle Labs

Trestle Labs is changing the way people with visual impairment read and learn. The company is working towards making world resources inclusive for the print disabled ie. persons with blindness, persons with dyslexia and elderly people.

Trestle Labs is a social impact enterprise specializing in finding, inventing and delivering localized context-specific solutions for global problems with the vision to create an inclusive environment using engineering, design and technology. Trestle which symbolizes support comes together with the inventive nature of a laboratory environment to lay the cornerstone for Trestle Labs, where we enable people and communities to unlock their aspirations by building assistive technology solutions. The organization strive to develop products which excite, motivate and engage users to go beyond their perceived limits.

Why Trestle Labs?

“Think of closing your eyes and read the book lying on your table”

There are more than 253 million visually impaired persons across the globe. The plight of visually-impaired in the pursuit of their academic, professional and individual aspirations is visible because of lack of user-friendly information and instructions, lack of sensitivity toward the challenges they face and lack of special educators and teaching facilities. This is why they find it difficult to flourish in formal education, career and economic growth. It should then come as no surprise that for children with disabilities, finding an inclusive school is difficult. The available stats pronounce the grim realities of the situation.

Though the National Education Policy directs schools to provide books with braille and large print, the problem arises when teachers cannot understand braille. Even if students are given writers during examinations and the necessary notes, there is no help for them to prepare for higher or competitive examinations. Lack of education further restricts them from getting employment.

But, Things which were not possible few years back are now possible with the emerging technology.

How it Happened?

The story began at Digital Impact Square (DISQ) centre – a TCS Foundation initiative in Nashik in January 2017. This pre-incubation centre trains students and fresh graduates to innovate using digital technologies and address social challenges prevalent in society.

After college I was highly motivated to work in the domain social impact, the reason I left my placement offers I was having at that time and joined DISQ as a Social Innovator.

Here Me and Bonny with our mentors from TCS started our journey of which led us to create Trestle Labs.

It all started with the curiosity to understand the means through which visually impaired make their livings easier. This took us to deep dive into the problems, which they face in their daily lives

We travelled in and around Nasik and Mumbai to gain the perspective of many individuals. We prepared questionnaire to understand that challenges and recorded their answers. We did an extensive on-field engagement, capturing their inputs through interviews and interactions and understanding the user behavior in their natural surroundings. Based on this extensive study, a set of needs were derived.

In this study we found that the access of resources for reading in real time is a big challenge for the persons with visual impairment.

After understanding the ground reality we found that in this technology age, reading even a simple paper remains a big challenge for them. Let it be at 20-year-old boy - who wants to make his career in banking, a government officer- who wants to read his office documents or a visually impaired parent - who wanted to read a book to his daughter and many more.

During this time, We met a guy in his 20s at NAB Nashik, who was preparing for competitive exams and was struggling to study on his own as all the books were available only in print form.

Another meeting with a blind couple was one of the trigger points that made us address the issue of content accessibility. The blind couple's one-year-old daughter developed rashes on her body after they fed her expired medicine. Something as inaccessible as an expiry date could have put her life in danger.

Through traditional methods like Braille and Audio Recordings, It was taking months to convert the content into accessible formats.

Through secondary research, After reading about 50 products in this domain, we realized that there are very few people working in the domain of providing content accessibility in real time and most of the solutions we expensive and inaccessible to developing nations like India.

We realized that Assistive Technologies, which are more successful, are inclusive in nature, they solve a desired need, and they are based on the concept of universal design and are available to the users at low cost.

The users wanted us to create a solution through which they can capture any text and read it on their own in their own language. We started iterating on various methods, created a proof-of-concept of a reading device for printed text, and demonstrated it to the users. The users were very happy with the outcomes.

After successful prototyping and understanding users need completely we started building a product, which can stay with the users and become the part of their lives.

At this stage, Our Co-Founder, Akshita, a software engineer joined us. She learnt about the challenges that the visually-impaired face on a daily basis during her final year project in college. In college she developed a device for the blind that could help them navigate. She was inspired to do something for that kid who asked her when he would get the device while she was testing her prototype in NAB Delhi.

We all started creating this solution with me taking care of the electronics, Bonny taking care of the mechanical and design part and Akshita taking care the software part of the solution.

Given the right people in team, the right environment, the right time and opportunity in life, we felt confident and chose to start Trestle Labs.

Having the vision to create an inclusive reading and learning environment that breaks away the social, economic as well as disability barriers using impactful innovations the founding stones of Trestle Labs were laid on principles of inclusivity and accessibility. Abhishek Baghel, Bonny Dave and Akshita Sachdeva started Trestle Labs in November 2017. Personal experiences of working with the visually impaired has helped the founders collaborate with each other.

After the work spanning 1 year with constant user inputs and feedbacks, we released the first version of Kibo device, which scans a book/document placed under its scanner and reads it aloud. The team sent the table-lamp-shaped device to NAB Nashik for testing.

Over successive iterations and learnings from the field, led to the development of KIBO XS device and a mobile application, Kibo: Access Simplified were developed.

Kibo can read all kinds of textual material out loud to the blind.

During this journey we realized the importance of having a great team and impact centric approach towards solving problems and we increased our team size and started providing the solutions to the users at large scale.

Our Innovations:

The technology should work when the people need it at most. If it serves the purpose with ease of access, miracles could be achieved.

Our innovation “Kibo” (which means hope in Japanese, is an acronym for Knowledge in a Box) enables the person with visual disability to read all kinds of textual material in real time in their own languages. It also enables to translate the text into their desired languages.

Kibo XS Device is a Multilingual Scanning and Reading device:

KIBO Device, which is one of the first personalized and intelligent reading and learning device, which reads-out text across multiple Indian languages in, real-time and translates into various forms.

It can scan and read aloud printed, handwritten and digital texts. The physical product, weighing just 400 grams, is foldable and the user can carry it anywhere. Trestle Labs also developed Kibo web-portal to ensure its compatibility with laptops and PCs. Once the Kibo XS device is connected with Kibo XS mobile app or Kibo Web portal, it can read out printed texts in real-time across multiple Indian and foreign languages.

Once you scan the text using the device’s scanner, you have the option to store it in Kibo Cloud to access it any time, anywhere through multi-device access feature. The user can also save, copy and share the content. All one has to do is place the text under the device’s scanner to instantly read it or translate the text to over 100+ languages.

The book scanned can be saved and the user need not scan it again. The Kibo XS device costs is 1/6th of the price of English-only Readers being imported in India currently.

Technology based on Smartphones has enabled the persons with disabilities in many ways. Having the computational power in their hands with mobile internet connectivity has made environment more accessible and inclusive for them. In the case of people with print disabilities like vision loss, it enables them read text, access documents, detect color, and identify currencies and many more.

Kibo App, an advanced reading and learning platform that offers one-stop access to content from multiple channels including documents(printed and handwritten), books, online digital libraries, universities, local publishers as well as self-curated content based on user's reading and learning needs. It delivers immersive reading and learning experience at par with a visually-abled reader's interaction with a hard-copy printed-book.

It is designed while keeping the principle of universal design in our mind. Kibo is completely accessible with mobile screen-readers like Talkback.

It caters to printed, handwritten and digital content in 10 Indian languages. The app reads out the text from the picture, PDFs and digital books in real-time. Furthermore, the app comes with 8.5 lakh e-books of various subjects like political science, history, science, and math. The app allows the user to go back and forth in the book, and saves bookmarks and supports note making on a smartphone.

Many visually-impaired are not able to get proper education in schools or do not pursue higher education due to lack of learning support. Kibo XS Device that can scan books, documents and instantly reads text in over 20 languages supports them in competing their education.

The innovations Kibo App and Kibo XS Device are changing the way how print disabled read and learn. They are opening avenues for them to read content on multiple Indian languages in real time. This is the way forward towards inclusive reading and learning for everyone.

The visually impaired don't wish to rely less on others, and thanks to a mobile application that made the text of her books into audio files. Through the audio files, the self-learning process became very easy. They are confident now and they feel comfortable.

After completing the stint with DISQ, the team participated in many competitions through which they received several awards and grants to scale up and improve the device and the app. Some of the events they participated in were UnLtd India, Nasscom Design for India, DST's Nidhi Prayas and Empowerment- SINE IIT-Bombay, Social Alpha Quest for Assistive Technology, Tata Social Enterprise Challenge and Rashtriya Swayamsiddha Samman.

Trestle Labs moved their base from Nashik to Bengaluru in November 2018, to further scale up the device and the app and added many user-friendly features to them.

The compassion towards the visually impaired, which is lacking in the current society, has led us to these innovations. The joy of working for inclusion has given us the strength to never look back.

These solutions solve a big gap in print disability by providing access to all kinds of printed, handwritten and digital text in real time. Users are using Kibo to independently read school textbooks, college notes, official documents, literature and many more in their own languages. This was impossible few years back. Things have become more accessible and inclusive for them.

With the Kibo app in hand the user feel empowered and independent. As our innovation is inclusive in nature the connect between the community and person with disabilities increases, thereby reducing inequalities.

Since July 2019, we have reached 21000 installs with an average rating of 4.5 on play store. The users have accessed millions pages of content and they have made it accessible for themselves.

Trestle Labs, today, has a wide range of clients, from NGOs, libraries, and universities like IIMs. Their innovation is definitely a concrete solution for millions of visually-impaired who aspire to achieve but are forced to give up their dream due to lack of accessible resources, technical support and infrastructure.

Team

We are young group of developers and entrepreneurs. An Interdisciplinary team was required to take up this challenge ahead and create impact. There are many challenges for a digital-social enterprise in India. But we have to overcome all with the time and perseverance.

We have a multi-disciplinary team of engineers in specialized in AI and Computer Vision, Electronics, Android and Web Technology, Accessibility testing and marketing expertise.

Abhishek Baghel, Founder, Strategy & Technology Lead

Akshita Sachdeva, Co-Founder, Product Development & UX Lead

Bonny Dave, Founder, Design & Customer Relations Lead

Appu Sreenivasan, Web Development Lead

Ranganath Banavathi, Accessibility & Customer Relations Lead

Akhil Battula, Mobile Application Developer

Shivani Trivedi, Business Development Intern

Mode and region of operation

Online: Website - www.trestlelabs.com

Playstore link - <https://play.google.com/store/apps/details?id=com.trestle.labs.kibo>

Head Office - Bangalore, India

Link to Product Video - <https://www.youtube.com/watch?v=5g2J1dEV9TE>

Product Manufacturing (For Kibo XS) - China

Market Regions

This solution is scalable worldwide. As it supports more most of the languages and is a low cost solution, Kibo XS has been implemented in Libraries, Schools and Colleges and is used as a digitization and translation tool. Started from India now also looking into other markets overseas, as visually impaired people are present all across the globe.

Sustainable Development Goals we work for

- Reduced Inequalities
- Quality Education



FOCUS INTERVIEW

Life of A Person with Disability

“The past, like the future, is indefinite and exists only as a spectrum a possibilities.”

-Stephen Hawking

In the past four months, the discourse on the impact of COVID-19 did not focus adequately on issues confronting the disabled, the world's largest minority group, despite there being universal disaster management protocols addressing their concerns. Having a disability in itself may not be a risk factor, but people with specific disabilities or chronic conditions are more vulnerable.

Existing health conditions, such as those relating to respiratory functions, immune system function, heart disease or diabetes, can be a contributing factor. An attempt is made here to draw attention to these issues.

Mudita Jagota of Faridabad-NCR, who has Spinal Muscular Atrophy (SMA) & Scoliosis rues the loss of Independence in COVID-19. Slowly and steadily learning how to deal with the pain in the absence of a physiotherapist, she talks about her Disability and share her experience of pandemic so far with I&A e-Magazine team via this insightful Interview conducted on 14th August,2020.

1. You have been a National Topper in CBSE, Class XII – PwD Category, a graduate from LSR and currently pursuing your M.A. in Psychology from Jamia Milia Islamia. This clearly reflects that you've never let your Disability become a roadblock in pathway of your success. Can you briefly talk about your journey so far?

It's a common assumption that disability cause Hindrance & if someone is disabled, they'll face hardships and not get it as easy as other people which is not the case. I never thought of it as a hindrance or a roadblock. I used it as my strength to move forward in life. Even while preparing for class XII boards, I never thought that I should be given some grace marks for just being disabled.

Probably it was tough for me to devote longer hours but I knew that at the end of the I will be the one celebrating the fruits of my success the most. When I came to LSR, I faced challenges, travelling was one of them but it helped me become independent. My parents were afraid of letting me travel alone but they let their faith in me & I started travel on my own. So many things happening at the same time but I never felt it taking too much. Health issues were their but I gave appropriate time to both my health issues and studies because I knew what my priorities were. And then Jamia happened. I even came late at night sometime. I never let my Disability limit myself. Disability is not going anywhere; it is here to stay with me so I have to learn to live with it rather than making a fuss about it. It has actually made me a lot more confident and motivated.

2. You have been quite vocal about your disability on various social media platforms and August being a Spinal Muscular Atrophy (SMA) Awareness month, would you like to tell our readers something more about it?

Yes, I have been quite active on my social media handles. My activism began in August 2019. Honestly, I never had any plans of doing this SMA Awareness series but one evening I just thought to give it a try. From that day I began to not just talk about SMA, but various disability issues, rights, stereotypes and discrimination PwD's has to face and everything. I started following Disability influencers and even attended conferences involving big shots which opened my avenues of meeting people of such stature.

SMA is basically a genetic Disorder that I have since birth. I was diagnosed at the age of 1. There are 4 types of SMA. There are weaker & stronger forms of a type. Weak type 1 has respiratory issues, unable to walk. Strong type I -not able to speak much, breathing issues so they have these equipment's attached to their nose, they also pass away at a very early age. Weak type II is not able to breathe properly, not even able to drink milk from their mothers' breast that why they die at a very early age, mostly by 18 months, sometimes not even able to hold their head. I am a stronger type II. I'm not able to walk. I have weak muscles which is across all types. There is an absence of a neuron that has caused weakness I muscles. I'm not able to lift my hands up in the air. I can't open a bottle or pen cap or lift any heavy object. I also have scoliosis which is a curve in the spine. Type mostly similar to type II with comparatively strong muscles. Stronger ones are diagnosed by the age of 18. Some stronger type III & type IV may even be diagnosed at the age of 40 when they start to wobble. It's a spectrum, a continuum so I'm not exactly type II but somewhere between type II & type III. For more information, readers can go to cure.sma.org and read more about it.

3. These unprecedented times of COVID-19 has taken a toll on humanity.

Everyone is trying their level best to cope with it but keeping in mind the fact that PwDs remain a little more affected, how're you coping up with the Pandemic and what challenges are you facing?

I have lived in this pandemic for almost 4 months now and it has been difficult in the sense that I have not been getting physiotherapy sessions at all. I need constant physiotherapy because of weak muscles. Physiotherapy is required so that the muscles that are working do not lose their strength and keep functioning. Although my parents are helping to some extent in my physiotherapy since they've seen my sessions since childhood. In initial 2-3 months till June, I was in a lot of physical pain. Usually when I'm going to college, movement takes place while transferring myself from bed to wheelchair and vice-versa. But now that I'm at home, I'm sitting more than usual on my bed while attending online classes in a cross-legged position so my knees began to pain. Another thing was no matter what happens, I could not go out of my house not even for essentials because of weak respiratory organs as time and again it has been said that corona virus affects those with compromised pulmonary or respiratory functions. I fall n that category. It was bothering me more because I'm a very outgoing person which in turn is affecting my mental health mental health and physical health has a direct connection. I took really heavy medicines which if I usually take, pain goes off within hours but now even after taking medicines the pain wasn't going away. I came out of it as soon as my assignments got over. I use to sleep more, talk to my friends and gave myself a mental break which proved helpful. These things helped within 2-3 days when medicines could not help. I went on a drive few days back and it really helped me cope with challenges.

4. The fact that there is minimal awareness regarding PwDs in society and that their existence is often taken lightly. This negative attitude has in turn created mental and physical abuse. What in your opinion could be done to create awareness in society?

Firstly, a lot of people in India have no knowledge of Disability whatsoever. Do you even remember us studying about Disability ever? Never. There should be something in the curriculum that makes children aware of the disability, maybe in social studies. Physical education does have a chapter on this but they've wrongly named it as 'Children with Special needs' . This leads to Discrimination. Give them their rights but don't give them unnecessary treatment. At least give us opportunities. if we cannot do it, we will voice it out. I cannot make models during school so I used to ask my teacher for an alternative like charts, etc.

Secondly, the government has launched few campaigns like Sugamya Bharat Abhiyan or accessible India campaign for persons with Disability but the kind of language used is bizarre. Then a term called 'Divyang' or 'specially abled' was coined as if we are gods which is a bad representation. By doing this, you're simply not acknowledging their Identity as Disabled. People often say why can't you focus on your ability and not on your disability. People need to understand that Disability is not a bad word that you need to sugar-coat it with good words. Accept the same as our identity. This is my appeal to all Government Institutions & everybody who is representing this community to take care of the language used and involve the stakeholders while making any policy decisions. Or when you're devising the curriculum for Disabled, involve them. Ask them what is needed rather than assuming. Lot of policies don't take that into account. Don't consider me special or inspirational because of my disability. I will become inspirational but my work will speak, not my disability. Thirdly, in rural areas, awareness camps should be organised & again stakeholders should be involved. And change is needed in the language used. Instead of using 'Divyang' word, 'Viklans' should be brought in practice. Precisely, I would say Inclusion is important. Lastly, 3 things are important- 'Simulation, Education & Contact'. Simulation makes people understand through exercises such as blindfolding everyone for some time, make them sit on a wheelchair, ask them to use few stairs and then go up using a wheelchair, or tie their hands with rope and ask them to switch on a button high on the wall. Education I have already talked about, even Disabled people should be educated as most of them don't know what their rights are. Most of the time, people will not even know they are getting abused physically or mentally. Contact would be as I said people seeing me in a camp in village. Coming from horse's mouth as you would say.

5. Do you ever feel you have to compromise your time for others? Like while using a lift, you have to wait for one to not be packed with able-bodied people who can easily approach stairs.

Honestly, I don't. I'm very Dabangg in that way. Whenever I'm using Metro, usually my father accompanies me in the morning so what he does is- he would simply ask people to move out & say she will go in first and that really helps. I tell my father to let me do it myself. So, if people start to go in, I tell them I will go in first. Sometimes what happens is people go in first without even listening to me so what I do is- I keep the wheel of my chair on the sensor of the lift so that its not able to close & say whoever can use the stairs, kindly use the stairs otherwise I wont let the doors close. Even I'm getting late but ill not let you use it. It's in fact written on the outside of the lift that it is meant only for old aged, sick and people with Disability.

They tell me we use the stairs because we are in a hurry and I tell them if you use stairs, you reach early. If I'm not in a confrontation mood, I let them go. Else most of the times, I do fight for my right but most of the people don't know so awareness is needed.

6. You have been to America and India; how will you compare the two in terms of Accessibility (both medical & Infrastructural). Can you share some Instance?

In terms of treatment for SMA, medicines are very expensive and they aren't even available in India. We are trying our best to get them in India. There is much more Accessibility in terms of medical resources in America. In India, there's no such one clinic for SMA. I've to go to pulmonologists, cardiologists and physiotherapist but in America, everything is consolidated in one clinic. There are specialists just for SMA, so no need to visit a number of doctors. Let me tell you an incident- when I was in class 8th, I visited a reputed hospital in Delhi for my scoliosis. They suggested me a spine correction surgery for it but couldn't go forward with it because of my respiratory conditions. It is 8-9 hours long surgery which would require me to go on a ventilator for that but doctors feared I may go into COMA and the reason they couldn't go forward with it. Few years later, we attended a medical conference for SMA in America and we talked about this issue with the specialists and they were like we can do the surgery very easily here and if we require her to go on a ventilator, we will make sure she doesn't go in COMA. They assured us they have those techniques and specialised tools to do that. So clearly, the medical Science and techniques are quite advanced there. I even know a friend who has undergone a treatment and she feel great after it. And in terms of Infrastructure Accessibility, of course America is far better than India. Not even a single restaurant here (Faridabad, NCR) is wheelchair Accessible, all have stairs. Only big hotels or malls have this accessibility, not all. Even the sidewalks are accessible in the US. They have special systems in US so if a Person with Disability wants to cross a road, cars will stop at a distance and let the person go first. Even the buses there are Accessible. Mall, hotels, Restaurants have to have Accessibility otherwise they can be penalised there. I remember a case of someone living in US, she posted a picture of a restaurant which was not Accessible. She even wrote a letter to the local Authorities about it, and a ramp was made within two days. US have wheelchair Accessible vehicle parking. In India also, its coming now like Select City walk and DLF mall. Not a lot of people know that in India if you opt to travel by air, you will have to check-in your wheelchair along with your luggage & use airports wheelchair whereas in US, they let you carry your wheelchair till the aircraft which they later check-in. but now its in India also, so we inform the authorities about the same well in advance.

Life of A Person with Disability



Tap the Icon to listen the full Interview



By:-

Lakshita Verma

I&A Team Member, GGSIPU



VOICE OF DISABLED: COMMUNITY RADIO

COMMUNITY RADIO IN SPOTLIGHT

● **RADIO UDAAN: VOICE OF THE DIFFRENTLY ABLED**

Alfaz-e-Mewat initiative began in the year 2012 based in Gurugram with a sole objective of developing rural areas. The Alfaz-e-Mewat, FM 107.8 transmits for 13 hours in a day throughout a week in 225 and more households in rural areas. The shows broadcasted on FM are based on the needs of local community which are identified through discussions with them. It also broadcast entertainment shows that constitutes of poetry, music, cultural heritage etc. Another such initiative is Gurgaon Ki Awaaz started in 2009. Gurgaon ki Awaaz follows an inclusive approach for LGBTQ or disabled community. Some of the shows on air are on livelihood, discussion on sexual and reproductive health, chat shows on based on family and relationship issues, psychological counselling and many more with special emphasis on the deprived community like LGBTQ and disabled. The listeners using their mobile phones can tune to FM seamlessly and listen to them.

In 2010, north east's first community radio service Jnan Taranga in Guwahati is established to create a knowledge-base especially for the people who are deprived and ignored by the mainstream media. Another similarly initiative is situated in Odisha, Chappar village in Koraput set off aiming for protecting and promoting cultural and traditional heritage. It also promotes the local talents and shares their life experiences, helps in spreading awareness about their rights, accurate flow of information related to various schemes introduced by government and holds discussions with local authorities for promoting awareness. So that people in the village can utilize the information and plan their livelihood in a better way.

● **RADIO UDAAN**

An internet community radio station, Radio Udaan began in the year 2014 with an objective to showcase PwDs on the channel where their opinions and talents can be brought out in public. Radio Udaan provide awareness to the visually impaired about the various schemes of government associated for them, programmes to create experiences that will help PwDs in engaging, informing, educating and entertaining with dignity and respect.

Radio Udaan has crowd in excess of 120 nations and its month to month audience insights transport somewhere in the range of 20,000 and 30,000. Through this stage, the radio broadcast is making mindfulness among individuals about the approaches of the legislature, their privileges and most recent plans. Open India is one such program that carries each such issue to the front. Udaan commends live shows during festivals such as "Diwali, Eid, Raksha Bandhan, and Independence Day". It shows live matches, competitions, occasions, classes, syndicated programs on decisions and substantially more. Through their inclusive approach they are trying to make the country more accessible. It provides short-term training programs with the help of technology for disable; it has recently arranged assistive tourism for visually impaired to places like "Delhi Zoo, India Gate, Wagah Border and Golden Temple, Dhola-ri-Dhani, a miniature Rajasthani village in Hyderabad, and Mumbai". Udaan generally is on air through internet connectivity by What Sapp and YouTube. They had recently organized Udaan Talent and Udaan Little Champs to promote talents of disabled.

The radio broadcast welcomes government pioneers, heads of affiliations and leaders of various associations to examine most recent arrangements, advancement projects and thoughts with individuals on the loose. "We hold question and answer meetings that witness dynamic support from our audience members. Our crowd profits by these meetings with most recent contributions from the individuals who matter," says the overall secretary. Udaan likewise hangs on-air instructional courses to give learning chances to their audience members. "Until now, in excess of 10,000 individuals have learnt nuts and bolts of PC and programming like Skype and drop box with our help. Intriguing instructive shows on math, English, and general information additionally establish improving scenes of our on-air content," he says. The transient instructional courses of Radio Udaan were very well known with the impaired. "Innovation assumes an essential job in the life of a handicapped individual. With the help of "National Institute for Empowerment of Visually Disabled (NIEPVD)", Dehradun, they help to improve the innovative aptitudes of a disabled people and make their mindful about most recent advances accessible, Radio Udaan sorted out transient instructional courses in various pieces of the nation. The radio broadcast has sorted talk meetings on "POCSO Act" and "Right to Education" in Delhi and Mumbai. In spite of the fact that sentiment and marriage are somewhat hard for the outwardly weakened, it is attempting its best to fabricate marital union and find legitimate counterparts for them through their shows. Up until this point, numerous individuals have discovered their matches with its assistance and have effective relationships. In our nation, their inspiration is to plan and to serve visually impaired individuals and change their circumstance.



Danish Mahajan

Chief Secretary- Radio Udaan
and Team

● **Message from Danish Mahajan**

Will Rogers has rightly said: "A man only learns in two ways, one by reading, and the other by association with smarter people." You know It makes us feel reflective when we look at the amazing work done by magazines. Radio Udaan has always been a great supporter of change and inclusiveness. When we see Inclusion and Accessibility magazine and its working, we feel proud. The purpose of any magazine is to bring change in the society and create awareness. This inclusion and accessibility magazine is talking about accessibility, inclusiveness and much more.

Initially the purpose of magazines used to be just to entertain but now, the magazines are doing a lot for bringing change in the society. When it comes to people with disabilities, their inclusiveness and accessibility; not many platforms are there that come forward and spread a word. However, magazines like 'Inclusion and Accessibility is not staying behind in scattering accessibility and sensitization.

You can find diversity in the columns, topics, discussions, and news when you read Inclusion and Accessibility magazine. We at Radio Udaan believe strongly in creating this world aware, informed, and advanced in maximum possible ways. We never hesitate to appreciate the moves that are taken by magazine. We take immense pride in sharing with maximum possible people about the vibrant and important work that platforms like magazines are doing. We not just rejoice the content of this magazine but also think that people should stay connected with these magazines to keep themselves abreast about the industry and the developments that are taking place. We keenly wish that these magazines keep on expanding their reach and touch millions of minds.



SIGN LANGUAGE DECODED

Entering into the world of Indian Sign language



Dr. Renuka V.N.

Senior Sign Language Interpreter
/ Interpreter Trainer President,
ASLI India

Sign Languages are complete languages with grammar and syntax and they provide a mode of communication for Deaf and Hard of Hearing persons across the world. Sign Language is the primary and natural language of a Deaf individual. It is a visual-gestural language with signs made by hands combined with facial expressions and body and lip movements. Each country has its own Sign Language, for example: American Sign Language, British Sign Language, Australian Sign Language, Indian Sign Language, etc.,

Indian Sign Language is the primary means of communication to 18 Million Deaf people in India, enabling active social participation. Having access to Sign Language is key to their cognitive development, positive social behavior, emotional well-being and linguistic growth.



(Image: Courtesy (INDIA
INCLUSIVE)
[https://india-
inc.info/portfolio/indian-
sign-language/](https://india-inc.info/portfolio/indian-sign-language/))

Hand shapes, Movement and location of the sign, Orientation of the palm (How the palm is faced), etc., are parameters of Sign Language. Its vocabulary includes signs which are equivalent to words in a verbal language.

Use of Sign Language is a human right of Deaf persons for accessibility to education, employment and information. Sign Language creates a culture unique to Deaf persons thereby defining a bond as a community with a sense of belonging, and makes one complete and confident.



(Photo: <https://www.indianfolk.com/sign-language-dictionary-giving-deafmute-voice/>).



NGO IN SPOTLIGHT

SAKSHAM – LIMITING LIMITATION



Saksham started its journey in 2003 with a vision to aware people about the capabilities of persons with blindness and create multiple opportunities for their bright future. Our Founders, Mr. Dipendra Manocha and Ms. Rummi K. Seth were driven to set up Saksham Trust with a belief that persons with visual impairment or low vision can do everything with only one change – the way things are done. The organization has its tagline ‘limiting limitations which conveys its vision very well.

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The organization has brought more than 150 Assistive Technology under one roof. Customised solutions which were available internationally to make them appropriate for their use in the Indian scenario. Developed some new assistive devices in collaboration with the leading institutes and organizations like IIT, Delhi and Phoenix Medical System.

Over the time, the organization has also expanded its online presence, whether it's creating an online shopping platform for persons with print disabilities or organizing weekly webinars on the usage of the most innovative and affordable assistive devices, we are leaving no stone unturned to create awareness and to reach out to people.

Saksham also has its group of technology experts who provide training for assistive devices before handing it over to the user. We have several undergoing projects which provides assistive technologies like laptops with screen reading software, refreshable braille display, daisy player and etc. at zero cost or at a significantly subsidized prize with the required training.



Saksham Trust - A Glimpse

To know more about the organization and its work visit www.saksham.org

To explore the latest assistive technologies for persons with visual impairment visit our online shopping platform www.saktek.in.

Saktek Online Store- [SHOP NOW](#)

A Unique Online Shopping Platform for persons with sight loss and vision impairment- Saksham's Technology Store.

Saktek Foundation- Discover your capabilities here.

Thank You

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SAKSHAM

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Any donations made to Saksham are tax-exempt under 80G of the IT Act | We are permitted under FCRA for receiving foreign donations.

Saktek Online Store- [SHOP NOW](#)

A Unique Online Shopping Platform for persons with sight loss and vision impairment- Saksham's Technology Store.

Saktek Foundation- Discover your capabilities here.



Snippets

SOME OF THE MAJOR DISABILITY RELATED ANNOUNCEMENTS BY INDIAN GOVERNMENT:

● Government Decides To Not Proceed With Proposal To Amend Disability Law

The Finance Ministry last month proposed to decriminalize minor offences, including those relating to cheque bounce and repayment of loans, in as many as 19 legislations.

Updated: July 09, 2020 04:03 pm IST

[All India Press Trust of India](#) |

● UGC Reopens National Fellowship for Persons with Disabilities (NFPwD) For 2018-19, 2019-20

National Fellowship for Persons with Disabilities (NFPwD) is provided by the University Grants Commission, or UGC, under 'The Persons with Disabilities Act,' 1995.

[Education](#) | [Edited by Bishal Kalita](#) | Updated: May 21, 2020 10:21 pm IST | Source: [Careers360](#)

SOME OF THE START-UPS PROVIDING ASSISTIVE TECHNOLOGY AND ARTIFICIAL INTELLIGENCE SERVICES PERSONS WITH DISABILITY IN INDIA

1. KickStart- customized cabs are equipped to accommodate wheelchair users as well as those with disabilities and senior citizens.

<https://youtu.be/Ok6mYpR1BSg>

2. Oswald Foundation- Anand Chowdhary and Nishant Gadihoke started Oswald Foundation by building a free reading solution for people with dyslexia and officially founded the company in 2016.

3. BarrierBreak- has set out to provide accessibility solutions to assist people with disabilities in using technology. Founded by Shilpi Kapoor, the start up manufactures products ranging from a vibrating watch for the visually impaired to Augmentative and Alternative Communication (AAC) devices.

<https://www.youtube.com/watch?v=oNGdNaFarhA&feature=youtu.be>

4. Rise Legs- is an Indian start up that makes cane prosthetic legs, which can be customized based on the purpose and appearance. So whether you want a sturdy one for running, or an artistic one with catchy designs on it, this can be you one stop solution.

<https://youtu.be/0ouxlWl6l3g>

5. Innovision- IIT Bombay alumni Surabhi Srivastava has built BrailleMe, a machine that plugs into mobile phones and computers to help the visually impaired access the internet and other digital content.

<https://youtu.be/dnenDf7hcT8>

SOME OF THE COURSES BEING OFFERED BY GOI FOR PERSON WITH DISABILITY

1. Landscaping, Gardening and Urban Farming-

https://nsdcindia.org/sites/default/files/PWD_AGR_Q0801_Gardener.pdf

2. Quality Assurance-

[sdncindia.org/sites/default/files/PWDAMHQ0102_%20In_Line_Checker_v1_30_10_2019.pdf](https://nsdcindia.org/sites/default/files/PWDAMHQ0102_%20In_Line_Checker_v1_30_10_2019.pdf)

3. Sales Support-

<https://nsdcindia.org/sites/default/files/QP-PWDASCQ1011-Dealership-Telecaller-Sales-Executive-v1-22-02-2018.pdf>

4. Training Delivery-

https://nsdcindia.org/sites/default/files/PWDQ0101_Trainer-Persons-with-Disability_v1.0_15July-2020.pdf

For many more courses given by National Skill Development Corporation of India, Govt. of India

**Click the below link for more search of the courses*

[https://nsdcindia.org/nos-listing/38#:~:text=Skill%20Council%20for%20Persons%20with%20Disability%20\(SCPwD\)&text=Skill%20training%20is%20imparted%20at,on%20disability%20orientation%20and%20sensitization](https://nsdcindia.org/nos-listing/38#:~:text=Skill%20Council%20for%20Persons%20with%20Disability%20(SCPwD)&text=Skill%20training%20is%20imparted%20at,on%20disability%20orientation%20and%20sensitization)

SOME OF THE ASSISTIVE TECHNOLOGY TOOLS FOR PERSON WITH DISABILITY

Blindness	<ol style="list-style-type: none"> 1. K- NFB Mobile Reader Software 2. Victor Classic X+ Daisy Cd Player 3. Q – Pointer (Voice recognition software- Hands free) 4. Braille Key board G2 contracted 5. Duxbury Braille Translation Software 6. Shree Lipi Braille Translation software for 12 Indian languages 7. Tatra point Adaptive Mini Braille Typewriter 8. OBR Braille Scanning Software 9. Switched on Braille Tutorial 10. JAWS Pro talking software for the blind Bilingual edition with English & Hindi 11. Magic Pro screen magnification software with speech 12. Open book OCR Scanning & Reading Software 13. Talking Typing Teacher Standard for single PC
Low-vision	Opal portable Video Magnifier
Specific Learning Disabilities	DAISY (Digital Accessible Information System)\ Talking Books\ Text Files & Recording Voices Notes
Hearing Impairment (deaf and hard of hearing)	Conversor Pocket Listner
Speech and Language disability	Quali Key on Screen Keyboard
Locomotor Disability	<ol style="list-style-type: none"> 1. Head Movement\ Body part tracking Mouse- Quali Eye 2. Pointing Devices(Switches for persons with muscular dystrophy and locomotive deficiency (set of 5 different types of switches)
Muscular Dystrophy	<ol style="list-style-type: none"> 1. Frogpad One Handed Key board (a set of left and right) 2. Foot Pedal

INCLUSION & ACCESSIBILITY BOOK RACK

- Resource book on Disability Inclusion-2019



https://www.light-for-the-world.org/sites/lfdw_org/files/download_files/resource_book_disability_inclusion.pdf

- HR Initiatives in Building Inclusive and Accessible Workplaces

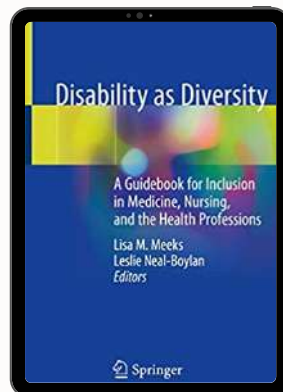


<https://www.amazon.in/Initiatives-Building-Inclusive-Accessible-Workplaces>

- Inclusion, Disability and Culture-2019



- Quality Assurance



- Quality Assurance



<https://www.springer.com/gp/book/9789811505232>

Contributed by -



Aditi Sharma

Research Assistant, Under
IMPRESS Project by Prof
(Dr) Shalini Garg

TRIVIA QUIZ



1. Which of the following are Disorders that can affect Learning?
 - a. Autism
 - b. Dyslexia
 - c. ADD
 - d. ADHD
 - e. All of the above
 - f. None of the above

2. Words such as Wheelchair bound, handicapped or special needs are acceptable to use.
 - a. True
 - b. False

3. What do the initials ADHD stand for?
 - a. Attention Deficit Hyperactivity Disorder
 - b. Autism Deficiency Hyperactivity Disarray
 - c. Addictive Deficit Hyperactive Disorder
 - d. None of the Above

4. Some people who are deaf do not use sign language.
 - a. True
 - b. False

5. In which year was the International Day of Persons with Disabilities introduced?
 - a. 1976
 - b. 1989
 - c. 1979
 - d. 1982

6. Paralympics are for people with Disabilities.
 - a. True
 - b. False

7. Which of the following is an example of Hidden Disability?
 - a. Autism
 - b. ADHD
 - c. Bipolar
 - d. All of the above

8. In which year was the wheelchair marathon race introduced to the Paralympics?
- 1981
 - 1985
 - 1983
 - 1980
9. Who is currently the minister for disabled people?
- Subramanyam Jaishankar
 - Thawar Chand Gehlot
 - D.V. Sadananda gowda
 - Ravi Shankar prasa
10. What is the name of the only university in the world that caters specifically for Deaf students?
- Jagadguru Rambhadracharya
 - Gallaudet
 - Hoftstra

Answers

- | | |
|------|-------|
| 5. D | 10. B |
| 4. A | 9. B |
| 3. A | 8. C |
| 2. B | 7. D |
| 1. E | 6. A |

Contributed by :-

Accessibility Enthusiast Lakshita Verma

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How you can contribute...

**"We will announce the call
for contribution for
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You can contribute in the form of:

- Giving ideas on how you can help PwDs.
- Articles
- Puzzles
- News Items, etc.

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