



# Connect Special

## Editor's Desk

Dear friends,

As I compile this edition, two words come up on my mind again and again - access and innovation- which together will make this community a better place for all.

*For most of us, technology makes things easier. For a person with disability ,it makes things possible --Judy Heumann*

Happy Reading!!

Regards,

Bhavna Botta

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**[connectspecial.in](http://connectspecial.in)**





## From The Heart

Meet **Anjee Agarwal**, well-known Asia Pacific accessibility consultant, researcher and author.

*Anjee Agarwal is co-founder of Samarthyam ([www.samarthyam.com](http://www.samarthyam.com)), disabled persons organization founded in 1994. Samarthyam has special consultative status with the United Nations Economic and Social Council (ECSOC) since 2015.*



## How do you build capacity in the community towards inclusion

My thoughts on capacity building for the community on what's inclusion is we help them create awareness on issues related to cross disability and inclusion is taken as *not doing it, but feeling it* so inclusion is all about having children with disabilities in the school sitting in the same classroom reading the same textbooks in alternate form perhaps ,but when the children go for your brakes so that children with disabilities can go with them to the playground to drinking water or in any activities or Sports. So it is not that children with disabilities are admitted in school for the sake of education but also like all other children doing all co curricular activities. So that's inclusion.





For adults with disabilities, inclusion can be like if somebody's going for the movie- people with disabilities are not being left behind at home saying that you can't go or you don't deserve to go because that is not accessible. But I'm working out the plan in a way that accessibility at movie place can be looked at so the entire family goes together. It's eating out in a restaurant or walking together in an accessible scenario made possible with accessible transport. So inclusion is in feeling for it ,feeling for the person ,to be together and make them feel that you are welcome. So that's inclusion for me.

### **Your thoughts on the Status of Inclusive India**

Accessibility campaign started in a very big way and there were a lot of ambitious plans attached to it- looking at the entire capital cities of all the states to be made accessible to the big inventory -starting with the public building ,the malls ,the theatres, libraries, the built-up infrastructure in terms of registration process as well as the transport terminal to vehicles, the website accessibility ,access to information, communication and technology. It was to be in a big way ,but because of one government official leaving the department the entire campaign came to a halt .There was no funding ,no inclusion in budget by the finance ministry.





There was no time criteria because the funds were not released by the central government and if released, it didn't reach the states in the stipulated manner. The access auditors were not paid and also there is the entire decentralization from the Ministry of Social Justice to the to the states to take it in a big manner, but the states were not responsive and also that there's no punitive action against non-compliance. So these are somethings which are taking away from the objectives of the campaign.

At least to begin with the new constructions which are happening in all the cities and towns should have been compliant and strict orders should have been given by the Ministries and public works department to make sure that none of the buildings should leave accessibility standards behind but it didn't have.

The good thing about the accessible India campaign is that at least people are aware of accessibility. We had to fight a long way to come up to this stage, 25 years we have spent talking about accessibility, promoting it as a matter of right and not as a matter of welfare or a charity issue. At least we have raised that much of awareness that people have realized that they have to do it but when to do and how to do with something with you still question mark for the civic agencies as well as for the different departments, which are not taking the task of accessible India as their mandate but just for the sake of it.





Few examples are there that stand as islands of accessibility but there's no connectivity. No accessible transport across the city, no cross disability accessibility, so this is something very sad.

### **What about beach access, personally I am working on it -your experience please**

Accessibility to beach has always been a challenge not just inside but outside India. But having said that people internationally have not only taken up the right to access the beaches but also innovative ideas have come forward in making beaches accessible .When we started long back, in 2007 in Goa, we started training the engineers and architects of the public works department .

And when the first project of ours-Accessible Goa was taken up accessibility was on our radar and though we did not have any construction ideas we worked out innovative ideas of using plastic sheets, or rolling out concrete structures ,or a path of 1 meter wide, which can take the bus from the main road to the beach and to the water. The Red Ramp project with Jhonson Tiles showed that in a very cost-effective manner one can provide beach accessibility. So yes, this is doable , practical and must be done because lot of people like us who use





crutches or walkers tend to get mobility impairments and left behind ,because of not being able to walk on the sand. So it is really important that we look into this area, challenges are there, but if you have the will it is really possible to find out the way.

### **Tell us about Samarthyam -new plans ,challenges and the number of overseas network**

Samarthyam has already accepted a lot of challenges on accessibility and since 1993 when we started the Samarthyam as a DPO and got registered in 2001 ,we decided that nothing will make us go back on particular issue of universal access. And this is something which we are looking in the big way and accessibility is not only for people with disability but also for people with reduced mobility, people who have medical ailments, people who carry children in their laps or in strollers, they could be people with medical conditions and lot of people who undergo any kind temporary ailment or temporary disability because of age, because of any a medical conditions or also because of the condition of carrying heavy luggage. So the plans for Samarthyam is that we are into making us standards and National codes ,we have already made standards on built environment in the National Building Code, we have worked on the urban bus specifications so that the buses rolling out should be accessible for people with disabilities ,we are working on the





the civil aviation rules so that people travelling by air will have travel with dignity and also with safety. We are also working on codes and guidelines on Urban Roads .Infrastructure is something we are still working on and that's with government of India.

So there is a lot of work happening in research, training as well as on codes and guidelines and standards for India. Of course, we are also working on networking for upholding the rights of women with disabilities, making sure that they are not undergoing any kind of violence due to dual vulnerability of being women and of disability. We look at gender inclusive policies and to ensure that women with disabilities are not left behind whether it is education, water and sanitation, nutrition or access to tourism ,everything has to look at inclusion of girls and women with disabilities. This is what we are promoting nationally, Internationally at UN level and in the 5 countries we are working with -Nepal, Sri Lanka , Philippines, Bangladesh and Bhutan .

### **What does access mean to you personally and how your perspective shifted to cross Disability access?**

Access actually for me is opening up those opportunities, gives us lot of choices and also gives us a life to live with dignity and quality .So accessibility is everything whether you talk about





employment ,education or accessing services or facilities or mainstreaming people with disabilities. I started thinking of working cross disability because if you talk about just one disability then there is a bias and the decision-makers on the policy issues may think that is very small percentage of population that is going to be helped .So it's always good to have a united effort , build bridges and also connect with lot of other disabilities . We also have taken one more step forward. By connecting with other movements like the women's movement, the children's movement, and also the movement of the elderly - it gives us lot more impetus to walk together to grow together in the disability sector .

### **Which project of yours is close to your heart ?**

My favourite projects are in fact two not just one. One is the Dilli haat ,when we started walking for the first pilot project on the accessible tourism and making Dilli haat fully accessible for everyone including artisans with disabilities and also to the visitors with reduced mobility. So that is one and the second project which is very much dear to my heart is working on the National Standards for India. Because in 1998, the first time we looked at those standards ,we found a lot many disabilities





were left out and were talking only about wheelchair users. So working on National Building Code with the Bureau of Indian Standard as well as the harmonized balance with ministry of Urban Development are the two projects which are very much near to my heart and I really love it because it was fascinating to work for 3 years at two centers. Accessibility standards are rolling in India, and now everybody every engineer, architect, urban planner look up the material as *The Bible* and make use of them as reference material. The only thing is, we just want them to be enforced and this is one challenge that we have accepted now, and we're moving forward with it.

I just want to give one line punch you might say this is my favourite line to all - "**Give Up On Giving Up**". So that nobody gives up and it's a long journey. We have to get together, get connected not just fighting for the cause but also fighting for the rights of people with disabilities.





## Tech solutions

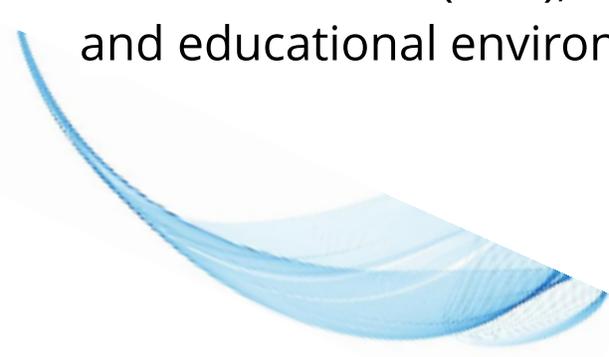
Meet Kunal Naik, Founder & Proprietor, WTMB explaining about the new eye gaze technology.

**“Everyone, regardless of physical or cognitive ability, needs a way to communicate, have access to education and have control of everyday technology.”**

Communication is a vital part of life. Often, people with speech and/or motor disabilities are left in silence because they do not have the tools needed to communicate and participate in the world around them. This is where Augmentative and Alternative Communication comes in. AAC is any method [device / system / technique] that helps a person with significant communication challenges communicate more effectively.

## Kunal, Tell us about your work.

**WTMB** is the marketing partner and sole distributor of Tobii Dynavox products in India. We are officially trained, dedicated and passionate about what we do. We have a wide assortment, ranging from solutions for assistive, augmentative and alternative communication (AAC), computer access, as well as the hospital and educational environment.





Tobii Dynavox, a wholly owned subsidiary of Tobii AB, Sweden, is the leading global provider of eye-tracking and gaze interaction-based Augmentative and Alternative Communication (AAC) devices that help improve the lives of individuals with disabilities by enabling them to communicate, control their environment and gain greater independence through their eyes.

Tobii Dynavox stands at the forefront of assistive technology and special education, delivering the most advanced, effective and empowering communication and computer access tools available.





## **Explain us about the technology and its benefits**

Gaze interaction is a computer access method that allows those with disabilities to navigate and control their computer with their eyes, similarly as an everyday computer user uses a mouse (e.g., activate, select, zoom, scroll, etc.) to control their computer. Gaze interaction only requires the movement of the eye itself—the movement of other muscles is not required, making it a perfect solution for those with rehabilitative disabilities (paralysis, spinal cord injury, repetitive strain injury, severe carpal tunnel) and motor disabilities (Lou Gehrig's, cerebral palsy, autism, etc.).

With Tobii Gaze Selection, a person with disabilities can perform a wide range of tasks through a computer that help them to communicate more effectively .

## **Does it allow complete access**

Tasks that this technology enables include the ability to open and control third party software, communicate through dictation software, surf the Web, make telephone calls, send e-mails and text messages, control their physical environment, create artwork, play computer games and stay in touch with family and friends through Facebook and Skype.





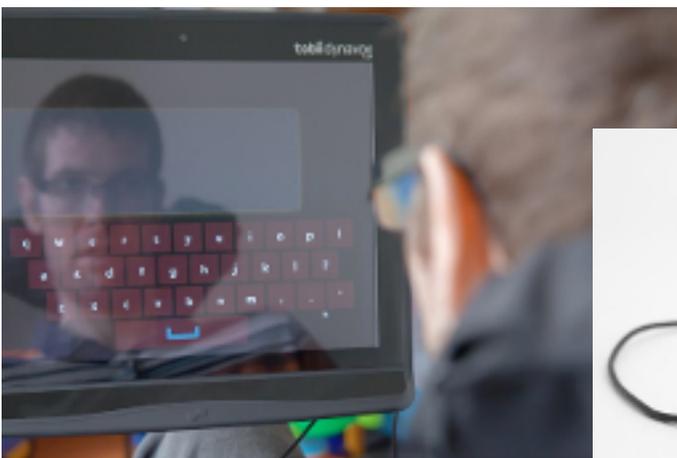
## **Great ,how is the response of users in India.**

Ganga , from Shishur Sevay,Kolkatta, was our first customer and we are proud to say that she is a geek today. Vikraman from Trivandrum our customer , runs multiple businesses .

## **Why is the price high and is there any chance of this decreasing so more people can afford it in India?**

As with any new technology the price of hardware goes down when volumes and adoption increases and today the entry level PCEye Mini is around 2 Lakh Rupees.

With growing adoption of eye tracking technology in mainstream and assistive technology, this development will continue and this will allow more people with various physical and cognitive disabilities in India to afford and use eye tracking as a method for communication, computer access and independence.





## **New tech helps deaf-blind people 'watch' TV**

Originally featured in [Access and inclusion through technology](#)

You may enjoy TV — as do many people with hearing or visual disabilities. But those who are both deaf and blind need special help to follow along. Now an innovative technology is turning television signals into a form that deaf-blind people can understand.

Ángel García Crespo is a computer engineer at Carlos III University of Madrid in Spain. His group has invented a new way for deaf-blind people to “watch” TV. He unveiled the technology at a conference, last year, in Aveiro, Portugal.

### **Getting technologies to work together**

Deaf-blind people rely on their sense of touch to communicate. One way to get info is to have someone on hand — literally. A deaf-blind person can get and give information through touch-based hand signals with another person. But it isn't always “handy” to have someone else around.



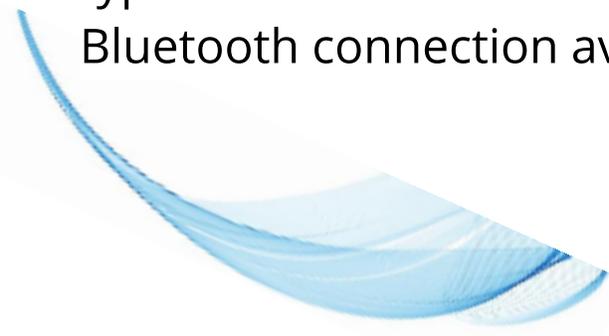


People who can't see can also get and send information with a braille line, better known as a refreshable braille display. The braille system uses patterns of raised dots to stand for letters and numbers. A refreshable braille display is an electronic machine with a changeable braille display. Dots or pins rise up or drop down based on electronic information sent to the machine. The new system converts TV signals to data that a refreshable braille display can use.

“Key to the system is the possibility of using subtitles to collect TV information,” García Crespo explains. “Subtitles travel with the image and the audio in electromagnetic waves that we do not see. But an electronic system can capture those waves. That is what we do.”

First, a computer program, or app, pulls out the subtitles and visual descriptions from the broadcast signal. The system then combines the information and converts both into data for braille. “No one had done this before,” García Crespo notes.

Now another app gets to work. It sends the data out to people's refreshable braille displays on demand. “This is done in real time, in less than a second,” García Crespo says. This lets a deaf-blind person “watch” TV as it is broadcast. The system will work with all types of refreshable braille displays, as long as there is a Bluetooth connection available.





Picture Description

Ángel García Crespo (right) chats with Javier, who is deaf-blind, through an interpreter (off screen) and a machine that presents words in Braille.

Currently, the system is only used in Europe. Anindya "Bapin" Bhattacharyya is a technology-development and training specialist at the Helen Keller National Center for Deaf-Blind Youths and Adults. It's in Sands Point, N.Y. Bapin is deaf-blind himself. And he says the new technology sounds like "a great development."

Bapin does raise a few questions. "There needs to be a menu to allow me to select a channel or show that is captioned and also has audio/visual descriptions," he points out.

Bapin also would like a way to skip an ad. People with sight and hearing can take a break when a commercial comes on. When they hear or see that the show resumed, they can again pay attention. Deaf-blind people would like such a signal to let them know when a show resumes, he says.

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