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## IX. Satya Special School: Digital intervention for Children with Special Needs in Puducherry

Satya Special School

#### Abstract

COVID-19 and the ensuing lockdown led to our special education services migrating online. Two initiatives stood out for their efficacy: WeLearn, the mobile tablet device library, and the creation of online parents' groups.

WeLearn used the library concept for learning for Children with Special Needs (CWSN) and capacity building for their parents through offline digital devices, with a high level of personalised content. The interim assessment of the offline worksheets indicates a good level of learning. This might provide a good way to supplement learning at the physical school, especially in satellite centres and in remote rural areas. The adaptability of technology and the resultant bonding of siblings also points to possibilities in creating informal groups of learning that are removed from a formal school setup.

The success of ideation and innovation in mildly mediated parents' online groups was an eye-opener in many ways. The interactions, the camaraderie and the ideas that resulted—mostly jugaad using household items—revealed the potential not just of sharing resources, but also that of self-advocacy. This could mark a turning point in our quest to move away from a charity-based model for our work with People with Disabilities (PwDs).

## Background

When the nationwide lockdown was imposed on 24 March 2020, the country came to a grinding halt. Satya Special School's centres had to shut, and we had to pivot to other modes of education. We had used the digital medium earlier, but this was something entirely different: We had to completely change our pedagogy and communication both within and without. Our journey over 2020 and the first few months of 2021 have helped us explore the possibilities of the digital medium in furthering our vision.

Satya Special School is an NGO that directly caters to around 1,000 children and youth with disabilities, and disadvantaged children, with a focus on inclusion in mainstream education.

Satya Special School works with children with various conditions including, but not limited to, autism, mental retardation, cerebral palsy, muscular dystrophy and Down Syndrome. Apart from the flagship special school in Puducherry, Satya also runs several other initiatives that include an early intervention centre, an alternative inclusive centre for education and three rural satellite centres.

Satya Special School has a zero rejection policy, which translates into any child with an intellectual and development disability (IDD) being provided support through one or more interventions. Parents of children at Satya Special School primarily come from Puducherry's semi-urban and rural areas.

In the rural centres, most of the parents are involved in seasonal daily labour in agriculture or nearby agri-based industries such as sugar factories. Some of them have micro businesses such as petty shops.

Another worrying statistic is that 45 percent of children at Satya are being raised by single mothers. Husbands often abandon a CWSN, leaving the mother with the double responsibility of financial security, and raising the child on her own.

Children with disabilities are already at a disadvantage when it comes to learning: According to a report by UNESCO, 75 percent of children with disabilities do not attend a regular school. While India has been in the forefront as far as legal frameworks for the education of CWSN are concerned, the onthe-ground situation is vastly different.

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In Puducherry, for example, the Right to Education rules do not include three out of five recommended provisions: those for assistive devices, representation of parents or guardians of children with disabilities in school management committees, or reference to special schools. In fact, the only state in the country that has all five provisions in its RTE rules is Kerala.

Just to get to school is, therefore, a huge accomplishment for our children and their parents. To paraphrase a recent popular quote from an actor: "Where our children's dreams are apparently fulfilled, typical children's struggles begin."

Special needs education is also very different from typical pedagogy, as the name implies. In its purest form, it is personalised and most therapy forms require physical contact. It emphasises both physical and mental development with a range of programmes depending on the child. As most IDDs come in a spectrum, it is nearly impossible to achieve much if taught in a classroom as in most mainstream schools.

Each child is provided with an individual plan, keeping in mind the child's development and condition. A typical day usually comprises a mix of group classes, individual sessions and physical therapy.

The interventions include, but are not limited to, literacy and numeracy skills, speech therapy, physical and occupational therapy, and other therapies that may be indicated for the child's condition. Satya Special School uses a combination of traditional, modern and alternative therapies from around the world — for instance, Watsu (passive hydrotherapy); art, drama, music therapy and repetitive chanting.

Most of the methodologies require active engagement with the teacher/ therapist, as many of the children have atypical communication and also attention deficit. Much of special needs education requires reinforcement, and without that, gains made in therapy and academics would regress soon.

It is in this context that COVID-19 and the subsequent lockdown posed significant problems to our programmes and services.

Stories of Change

We realised we had to pivot our programmes quickly, as there would be no respite in the near future. We had three major strengths:

- a. Our belief in parents, especially **mothers, as co-therapists.** Mothers of children at Satya Special School attend as many as 30 training workshops/ sessions related to children and youth with special needs every year. This would prove critical in our continuance of effective services.
- b. Our **deep connect with the communities** we serve. Since we are based in Puducherry and neighbouring areas, we are acutely aware of the hyperlocal situations that contribute to and affect the lives of people with disabilities in our communities.
- c. With a strong belief in the efficiency of working together, we have an advantage when it comes to **networking** with other entities: organisations, government, educational institutions, and the like.

While the organisation was involved in relief efforts, academic and therapy sessions were also being looked at.

Deciding to continue learning online was the easy decision. This, however, came with its own set of challenges that threatened the inclusivity that we seek from society.

## **Remote learning**

When lockdown was announced and the scale of the pandemic became apparent, there was no question that Satya would continue its services. The obvious choice for the same was the online medium, as soon as the imminent threat of survival was addressed.

We had to put in place a few online processes that were natural in the physical space: An online support group for teachers to discuss and ideate the new pedagogy; weekly online staff meetings to solve issues with the interactions and to support teachers with ideas for engagement; a detailed tracking mechanism to ensure that the child's individual needs are taken care of, and to study efficacy of online learning for IDDs; and detailed parent feedback mechanisms, to address any concerns about the child, as also wellbeing of the family. This included a choice: The number of classes they wanted per week (one to three), with an option to opt out of digital learning as well.

While the number of classes held may not accurately reflect impact, it points to increased participation with 40,000 sessions being held from August 2020 to March 2021.

#### Timeline of online classes preparation:

March 22: Voluntary public curfew

March 24: Nationwide lockdown announced

March 24: Satya staff set a schedule for calling parents and checking their well-being. Immediate needs of provisions, vegetables and medication were identified

March 25: Relief work commenced

**March 25-30:** Parents required support to engage their children, who were otherwise not engaged and were watching TV or playing games on the phone. They were also unable to leave the house, which made matters worse

**April 6:** Online classes began, but without any tracking mechanism. The aim was to see if the medium was working for children with IDDs, and if the teachers were able to engage them well

April 15: An assessment was done, with mixed yet promising results.

**April 20:** A schedule was put in place, along with a tracking mechanism using Google Forms.



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Figure 1: Online classes - individual and group sessions.

Figure 2: Attendance following normal year patterns



A few other factors:

- a. Attendance following normal year patterns, especially in individual sessions. (See Figure 2)
- b. Parents buying smartphones for the purpose of classes.
- c. Parents who only signed up for the group sessions signing up for individual sessions as well.

## **Challenges in remote learning**

#### Inaccessibility:

Many of the children were able to access online learning, even if learning was not optimal. We surveyed the families of the children. The following data captures their situation:

Table 1: Data on children's access to online learning

Category	Percent
Who have access to internet and CWSN are able to attend classes	20.1
Who have access to internet but CWSN not given priority	43
Who have access to phone but no internet and hence needed to be supplemented with activity sheets	24.6
Had other home-based intervention	7.9
Families who moved to their native villages	4.4

Some of the children spoke with their teachers on a phone call, because of the lack of internet connectivity. A lot of special education happens with visual cues reinforcing auditory cues and in many cases, the phone call by itself could not engage the student.

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#### Parents' capacity building:

A large part of our work involves creating parents as co-therapists in the development journey of the children. This starts when the child is admitted to Satya Special School, when the parent (typically a mother) takes a parallel journey to that of her child.

Training for the parent happens at three levels:

- 1. Training specific to the child's goals. For example, if the child's goal is to be toilet trained by the end of the year, the mother is given individual training on ways and means to achieve that.
- 2. Training to achieve attitudinal change: These trainings, while generic, depend on the stage of perception each family/member is at. This often includes both parents, grandparents, and siblings as well.
- General training/awareness sessions: These sessions are on topics of general interest to the disability community and includes varied topics such as self-advocacy, micro enterprises, financial planning for CWSNs, etc.

When the lockdown was imposed, there were challenges in transitioning some of these activities online. This was especially true of parents without internet connectivity, who could not access physical therapy classes. Parents could, however, perform physical therapy for their children. While the school had specialised equipment for the same; at home, parents had to use workarounds.

We also recognised that some of the training that we provided to mothers: livelihood training, for example, would have to be postponed.

Apart from the formal training sessions, several activities and events bring the parent community together, to form a cohort that helps build stronger communities. N Geetha, mother of our student Ananya, is a vocal advocate of the rights of the disabled. She not just helps other parents at Satya, she also ensures that people receive the right information regarding their child's disability. "When I go to the beach and see people struggling with a special child, I walk up to them and tell them about my journey," she says. Mothers like Geetha help keep the communities going, and amplify the effects of the therapy. We were keen that the sense of camaraderie exemplified by parents like Geetha continued.

Two interventions would help us meet these challenges:

- 1. The "Tablet Library Project", a library for devices preloaded with lessons for the children, and videos of physical therapy for the parents and caregivers, and
- 2. Parent WhatsApp groups, which helped disseminate knowledge and foster a sense of community in parents.

### Intervention 1: Tablet library project

Children from many villages did not attend the classes and when our staff reached out to them, they indicated that they did not have access to the internet. Many of them did not have access to a smartphone as well. Some children with cerebral palsy either did not have internet, or could not view content on a small screen. Lessons over the phone did not work for them.

While our online classes with other children progressed, we put our heads together to think of ways to reach the "unreached" more effectively. After all, we advocated inclusivity in every sphere: surely, we should find a way to be inclusive in our innovations?

It was clear that without intervention, they will not be able to make progress in their therapy and/or academics. With our core focus on creating mothers as co-therapists, we knew that the mothers were capable of taking on the challenge, but with some help.

Since our therapeutics were always personalised, we wanted any model to incorporate this.

Our key requirements for a solution were:

- a. Accessible
- b. Personalised
- c. Low risk of COVID-19 transmission
- d. Cost effective

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#### We looked at a few options.

Intervention	Accessible	Personalised	COVID-safe	Cost-effective
TV programmes				
Purchasing smartphones				
Personal sessions				
Tablet device library				

#### Table 2: Options considered as means of reaching the "unreached"

**Television programmes** were the first thing we considered, to see if lessons could be beamed on channels. The neighbouring state (Tamil Nadu) was considering broadcasting lessons for higher classes on television. We explored this for a bit before realising it was not personalised enough for our use, and our parents and children would have to wade through a lot to get to something that they could actually use. Also, it was a large effort to get the programmes ready for television broadcasting.

**Purchasing smartphones** for each child. This might have worked, except that it would not work well for our children with cerebral palsy who have low vision. The financial implications of this were huge.

We briefly considered **personal sessions** before dismissing them as too risky. Our children are immunocompromised and we needed to be extra careful as they are not always able to wash their hands frequently.

We knew that tablet devices worked well. They could be preloaded with therapy videos and interactive lessons for kids, and worked offline as well. However, purchasing one tablet for each of our 300-400 rural children would be too expensive. Plus, we did not know how it would work.

That's when we hit upon the idea of a tablet library. One tablet device could initially service three CWSN and we could later change it depending on efficacy, need and funds available.



Figure 3: Satya staff explaining the working of the tablet device

A timely fundraising effort by Give India, and donation by the Azim Premji Philanthropic Initiatives enabled us to start the project with an initial lot of 40 tablet devices. We settled on the Samsung Galaxy Tab A 8.0 and loaded various software on it, including the Avaz App, Blessed Angels, Kavi PTS and Jellow. Several other resources, such as our lessons and curriculum, storytelling and puppetry by our parents, and activities for parents including tutorials on how to make TLMs were loaded on the devices, making it a onestop resource for their children's developmental needs. A complete list of the loaded programmes and software are in Annexure A.

#### Planning

As we waited for the devices to be loaded and sent, we brainstormed on what the tablet would contain. After all, we were trying to condense our entire bouquet of services onto an eight-inch screen!

We took inventory of all the content we had earlier created and catalogued and looked over them for currency of content. This was primarily done online.

We then took the individual plans for each of the 180 children who would be served by the library and mapped their needs to the lessons and developmental milestones. We then filled in the gaps by creating a combination of lessons, activities on the software, as well as exercises that could be performed at home. For material that was not available, we had the teachers/physical and occupational therapists create content and send it over, so that we could include it in the tablet.

With this template in place, we created lesson plans for each child. This included creating separate folders for each child, with follow-up offline activity sheets. Special education, with its inherent personalised nature, needs to take care of the child's current level and possible growth and development and therefore, planning for special education takes more time than for mainstream education.

Also, because of the uncertainty of the outcomes, course correction, too, is an important aspect of special education. Aware of this, we created a tentative timeline for each student, but knew that lessons and development may not occur as expected. The emphasis was on the child being able to access the services, and not so much on the timeline.

Each child, whose personal plan was drawn up, would be given the tablet with his/her lesson on it. They could navigate to it on the device and start their lessons.

For parents, too, the schedule was drawn up and loaded on the tablet. All online training sessions were recorded and uploaded on the tablet. Parents could therefore access all the training materials and sessions. Step-by-step lessons on therapy exercises were also downloaded onto the tablet, for each parent. A few storytelling sessions by other parents and other simple videos were also shared with the parents of the children who used the tab device library.

#### Two days in the life of the tablet device

#### Monday:

**10 a.m.:** A Satya staff member gives the sanitised tablet to Child A. The child navigates (or the parent helps them navigate) to the lesson/activity of the day. The content also features videos for development, such as videos on how to brush their own teeth, etc.

The parent also accesses the videos meant for them. A few COVID-specific videos were also uploaded as were videos of online sessions.

**3 p.m.:** The staff member collects the tablet and provides some offline worksheets to Child A. The staff member also has a conversation with the parent about the physical therapy exercises, and any concerns or difficulties they may have faced.

**4 p.m.:** The tablet is returned to the nearest village centre where it is sanitised. The librarian makes note of the lessons completed by Child A and loads the activities for Child B on the tablet.

Tuesday:

9 a.m.: A Satya staff member picks up the tablet from the centre.

**10 a.m.:** The staff member gives the tablet to Child B. Based on Child B's routine, he/she performs the activities given. There are several activities uploaded, so that the child can move ahead a couple of steps, if they would like.

In the meantime, Child A is working on the offline sheets, and the parent is also working on the exercises learnt the previous day.

The same schedule is followed for Child B.

On Wednesday, Child A receives the tablet, and Child B is working on the offline worksheets.

The tablet is not distributed on Sundays, when all the data is collated and sent to the head of academics at Satya Special School.

#### **COVID-19 safety measures**

We purchased a COVID-19 oven, and also disinfected the screen every time it was collected. Although the WHO has now mentioned that COVID-19 does not transmit through surfaces, it was a concern when we started the project.



Figure 4: Cycle of the tablet device intervention

#### Impact

While formal assessment of developmental levels has not been possible due to the absence of face-to-face interactions, it was observed that 35 percent of the children progressed three learning levels.

What is important, from our perspective, is that these are children who would otherwise not have had access to any learning or therapy whatsoever.

**Therapy:** Our mothers were able to meet the challenge and exceed expectations by taking the process one step ahead. While mothers (and fathers, as many were confined to their homes) learnt about simple therapy exercises that they could do at home, their confidence in dealing with their child increased as well. Parents who had an internet connection were able to go one step further by communicating with a cohort of parents using the WhatsApp group (See **Empowering groups**).

**Intuitive use of the device:** We noticed that children used the devices intuitively after a few initial introductory sessions. Over a period of time, their use became expert, paving the way for their use of technology for effective communication, an important skill for all children with disabilities.

Figure 5: Children learnt the working of the tablet device quite intuitively



**Communication:** Teachers reported that children were able to easily grasp new words and add to their vocabulary.

**Participation from other family members:** Traditionally, the roles of parents in households with CWSNs has been clear: the father (if he is present) goes out and earns and the mother takes over the caregiving role completely. The online classes brought about a welcome change: participation from family other than the mother.

This figure, usually in single digits, reached an unprecedented 24 percent when online classes were happening. While part of this is simply due to the lockdown, the persistence of this figure can be attributed to the interest in and exposure to online classes.

Relationship	Participation level in %
Mother	76
Sibling	15
Father	6
Others	3

Table 3: Family participation in online classes

**Sibling bonding:** One of the unintended but heartening outcomes of the project was increased bonding between siblings of CWSN with the tablet devices and the games as common ground. Siblings of CWSN both played and helped their brothers/sisters learn through the devices, leading to increased communication.

#### Success story

K Rajesh, son of R Kumar, who works in a petrol bunk, had trouble adjusting to life without school. Rajesh, who is on the autism spectrum, could not attend online class either, as the parents could not afford a smartphone, he would just sit idle, or try to go out of the house. After the e-tablet was given to him, there are a lot of changes in him, says his mother, K Kavitha.

Figure 6: K Rajesh uses a tablet for his classes



"Now we could see a lot of changes after e-tab was given to him. With interest, he is watching the activities and tries to imitate what is visualised. We can also see that he is learning quickly. Also he has reduced watching television. Now his younger brothers also like to watch the lessons taught in the tab, and they are now playing together. That's a good sign for us," she says.

Due to the digital innovation, Rajesh was able to continue on his developmental journey. He was also able to play with his siblings, something that might not have happened otherwise.

(For other success stories, please see this video: https://www.youtube.com/watch?v=NvfUfnOdwol)

#### Limitations

When we piloted the library, we discovered that some children with cerebral palsy were unable to access content on the tablet device because of low vision capability. We were able to procure larger laptops for them; however, the data might have to be captured earlier on in the process.

Cost is a limitation, as the project depends on initial donation of the tablet device. We are exploring if there can be a sustainable model for lending of the tablet devices that can partly or wholly offset its cost.

A few children from distant villages where there were only one or two children with special needs were left out, because of the impossibility of the logistics. A few villages that were relatively COVID-free did not allow those from outside the village to enter as well.

#### The way forward

Satya will try to understand the scope and possibility of integrating guided digital learning into the curriculum, to multiply the efficacy of interventions.

Some of the areas we want to explore are:

- 1. Testing the efficacy of digital learning and expression as a complementary method.
- 2. Robust and modular assessment of skills/learning

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- 3. Including digital learning as a core competence for our children
- 4. Exploring the model of shared digital devices to maximise impact per rupee.

## Intervention 2: Parent WhatsApp groups

A school for a special child is empowering not just for the child, but for parents as well, as they automatically become a support group for each other.

Satya Special School's focus has been on developing parents as cotherapists, and a typical parent undergoes at least one workshop/training session a month, related to their child's condition.

This model, of working with parents, especially mothers, as co-therapists, paid rich dividends when the lockdown was announced and we had to rethink our strategy.

The informal cohort of parents helped each other weather the storm. We at Satya stood aside to let them take centrestage, only nudging them along when needed.

Before the lockdown, mothers interacted informally — in person and sometimes, on a parents' WhatsApp group. With the lockdown, separate WhatsApp groups were created for each of our nine centres.

Parents who had been with Satya for a long time gave valuable suggestions to mothers who had just admitted their children. With the lockdown imposing physical and mental strain on the parents, it was also a place where mothers found a safe space to converse.

Some of the activities of this group of parents included:

- 1. Periodic storytelling sessions, uploaded as videos, for other parents. (See boxFrom Satya, with love)
- 2. Ideas and suggestions for substitutions to therapy equipment. For example, one mother suggested that one can use a vaanali (frying pan) in lieu of a balance board, and another, that a stack of pillows can be used instead of therapy balls for posture. Our physiotherapist closely monitored these threads to ensure that the suggested tips were appropriate.

- 3. A safe space to talk and share stories about problems and issues they faced.
- 4. Encouragement and tips for newer Satya parents to manage the situation.
- 5. Ideas and creation of Teaching and Learning Materials (TLMs) from easily available household materials

Figure 7: Ananthalakshmi B (first from left) is one of the mothers who have helped other mothers navigate the lockdown and attendant problems with simple home activities





The encouragement from the group has helped one mother start her own YouTube channel: With love, COCO, with an eye to celebrating her child (see box, From Satya, with love). Other parents too, have shared that their outlook on disability has changed after the multiple interactions online.

Reporting on the challenges of parents of children with special needs, The News Minute dated 19 September 2020 writes,

While children in mainstream schools have been attending online classes, many schools for children with disabilities have not provided any support for the parents to bridge the gap in education. There are, however, a few exceptions. Instant messaging platforms like WhatsApp have played a major role in providing the much-needed support that the parents need in these testing times. While a few school teachers have been sharing their tips to keep the children engaged, it's the community of parents which has really come together to ideate and soldier on.

"After the lockdown happened, we parents started feeling restless because we didn't know how to keep our children occupied and support them, to make them feel comfortable at home. My son used to bring me the bag, the vehicle keys etc., to indicate that it is time to go to school every day," Santhi says. But with a WhatsApp group already in place with a few teachers from the school, it was just a matter of time before the parents started interacting more with each other.

"For example, nowadays when I narrate a story for my son, I also record it and send it to the group so that it can be narrated to other children who also like stories. Similarly, my son loves colouring. Other parents hence share nice pictures or colouring tips to make the activity engaging for my son. It is a collaborative effort and it is very useful for us as a group," she explains."

Women who did not have a smartphone/access to WhatsApp were able to get important information through other women in the village, or through the tab library. The groups therefore turned into a critical resource for the parents.

Satya staff, who were also in the groups, gently nudged the conversations and suggested modifications to the ideas that sprung up.

"The ideas were extremely innovative, and I was awestruck at some of the ideas," says Sheikh Sheriff, project coordinator. "Even we had never thought of using some of those materials [that the parents did]."

#### Limitations

One of the limitations of the groups is the exclusion of parents who do not possess the adequate digital tools. While information and ideas flowed offline to this cohort of parents, the immediacy of idea exchange is lost. This requires some research to see how this group can be better equipped to participate.

Some of the limitations were offset by loading some of the resources to the tablet device, for use in the tab library.

#### **Case study**

From Satya, with love Sampoorna, Ananthalakshmi and a frog called Coco

Ananthalakshmi Bharath sets up the phone camera after dinner, propping it up with a couple of pillows and the help of her 11-year-old son. When the camera is switched on, she starts telling a story to her daughter, Sampoorna, 8. However, the star of the show is Coco, a sprightly puppet frog with goggly eyes and an orange and yellow mouth.

In one video, Coco convinces Sampoorna, who has Joubert's Syndrome, a neurological disorder often characterised by a lack of coordinated movements, to eat her dosa with chutney. And she complies. In other videos, Coco helps Sampoorna (and her friends) learn, laugh, play, say thank you and please, and yes, eat.

"I discovered that Sampoorna thinks of Coco as her friend, and when Coco tells her something, she immediately does it. I realised the power of puppetry, and it made things easier for me, especially now," says Ananthalakshmi.

Ananthalakshmi is one of many parents at Puducherry-based Satya Special School who are sharing innovative ways to work with their children with special needs during the lockdown. They create, share, and help each other deal with the lockdown and its attendant stresses.

This is largely possible because of Satya Special School's emphasis on parental involvement in the development of a special child. Ananthalakshmi happened to see a puppeteer after Satya Special School shared a link to a webinar, and Ananthalakshmi thought she would try it herself.

"Mainstream schools often don't know how to handle the fragile psyche of parents of CWSNs. We, at Satya Special School, give confidence to parents, and also explain the situation to the parents. We strongly believe in parents as co-therapists," says Chitra Shah, director of Satya Special School.

Based on the feedback received by other mothers of children with special needs, Ananthalakshmi has started a YouTube channel starring Sampoorna and Coco.

Ananthalakshmi credits Satya Special School with the positivity in her attitude, which is reflected in her YouTube channel. She says, "I wanted to show that our children are not always sad. There is a lot of joy and happiness in our lives as well."

Ananthalakshmi's YouTube channel, With Love Coco, is here: https://www.youtube.com/channel/UCXVSYbs6q0OecLzHBrCrDKQ

#### The way forward

Obsolescence is the ultimate goal of every non-profit organisation. The way to this can be through several routes:

- 1. Government intervention and services
- 2. Self-empowerment and awareness
- 3. Groundswell of support and ownership from community

With our lockdown experiences, we realised that the light of empowerment can burn bright, with only a bit of starter fluid from an organisation, as with the WhatsApp group of parents.

Digital special interest groups have an amazing potential to empower and change the landscape of awareness and rights. We hope to be able to encourage and empower the groups further, and expand this to other aspects of our inclusion rights work as well.

We will work closely with parents to ensure that it does not deter them from accessing and contributing to the resources and actions of the group.

The key to the child's well-being lies in inclusion and partnerships, and Satya Special School hopes to be able to fuel both.

For us at Satya, the digital domain had hitherto been a tool for education within the classroom and communication with parents. The lockdown opened up possibilities for better outreach, even beyond the pandemic. It is clear that the models of communication and learning are evolving and we recognise the need to explore it further.

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#### Annexure A

Software and resources uploaded on the tablet for the device library:

- 1. Avaz App: Avaz is a picture-based communication and learning application for people with special needs. It facilitates collaboration by offering different training modules and resources that enable the entire ecosystem around the child.
- 2. Blessed Angels App: Blessed Angel, is to help children with learning difficulties, with the primary goal being to enhance their cognitive skills.
- 3. Kavi PTS: Kavi-PTS is an augmentative alternative communication (AAC) device to help children with severe speech impairment to interact with the external world.
- 4. Jellow: Jellow Basic Communicator is an augmentative alternative communication (AAC) system that uses icons/images to enable aid communication in people learning to speak or with difficulty with speech and language.
- 5. ABC Kids for learning letters of the alphabet: A fun learning application for kids, to introduce them to English alphabet learning in ABC phonics.
- 6. Satya's lessons and curriculum
- 7. Storytelling, puppetry videos by mothers of students of Satya Special School
- 8. Tutorials on making TLMs for parents
- 9. Meditation exercises for parents
- 10. Colouring activities for improving attention and concentration
- 11. Kids flash cards
- 12. Speech therapy activities

For more information, please write to Meera Rajagopalan at meera@ satyaspecialschool.org