



ANNUAL REPORT

2018 - 2019



Sol's ARC

Empowering Teachers...
Enabling Learners

About Sol's ARC



Sol's Arc is a registered charitable trust established in 2003 with a vision to ensure that every child learns. Sol's ARC creates inclusive learning solutions and partners with various organizations on ground to implement them.



VISION

Every child will learn



MISSION

Universalize educational opportunity for all children in India, through appropriate research based inclusive pedagogy, training & delivery.



GOAL

To create a scalable replicable model to reach every last child.

Or Guiding Principal



SUSTAINABLE
DEVELOPMENT
GOAL

4
QUALITY
EDUCATION



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Our Journey so far

▶ **2003**

- Registered as Charitable Trust

▶ **2004-06**

- Started with remedial therapy
- Within a year extended to other services

▶ **2007-09**

- Started franchisee in Kandivli, Mumbai (1st)
- Started India's 1st parallel school offering curriculum for children with learning lags
- Began research and curriculum development

▶ **2010-13**

- Started franchisee in Byculla, Mumbai (2nd)
- Consultation and training for school and other organisations

▶ **2013-15**

- Pilot studies conducted
- Project validation with National and International Agencies
- Focus on capacity building

▶ **2016-17**

- Standardisation of primary level curriculum
- Partnership with 2 organisations for scaling curriculum to reach out 25000 children in states of Maharashtra and Rajasthan



Sol's ARC Model

Sol's ARC partners with

Govt. & Non-Govt. Org.

Mainstream Schools

Special Schools

To provide



Inclusive learning materials



Program Framework



Training



Monitoring & Evaluation

Sol's ARC Projects

Sol's Arc has two key projects that focus on ensuring that every last child can learn and every young adult can get a job.



Special Edge- The School Inclusion Project -

The Special Edge project provides inclusive learning content in literacy and numeracy and partners with various mainstream and special needs schools for building their capacity to ensure that every last child can learn.

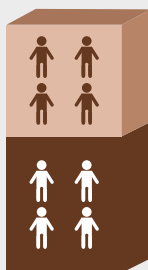


Pathways- The Vocational Training Project -

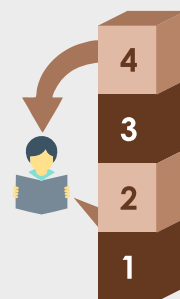
Building industry and Government certified courses for adults with disabilities thus providing a career path for young special needs adults.



The Problem



More than 50% of the children in India today are not at grade levels.



GRADE

A typical student is at least two grades behind the level that is expected for their age.

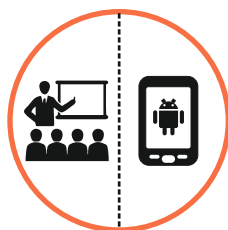
*Source: World Bank Data, Annual Status of Education Report (2014)

Sol's ARC Solution

Sol's ARC empowers and builds teacher capacity to

1 Identify learning lags

- Class assessment tools to identify present levels of children in all topics.



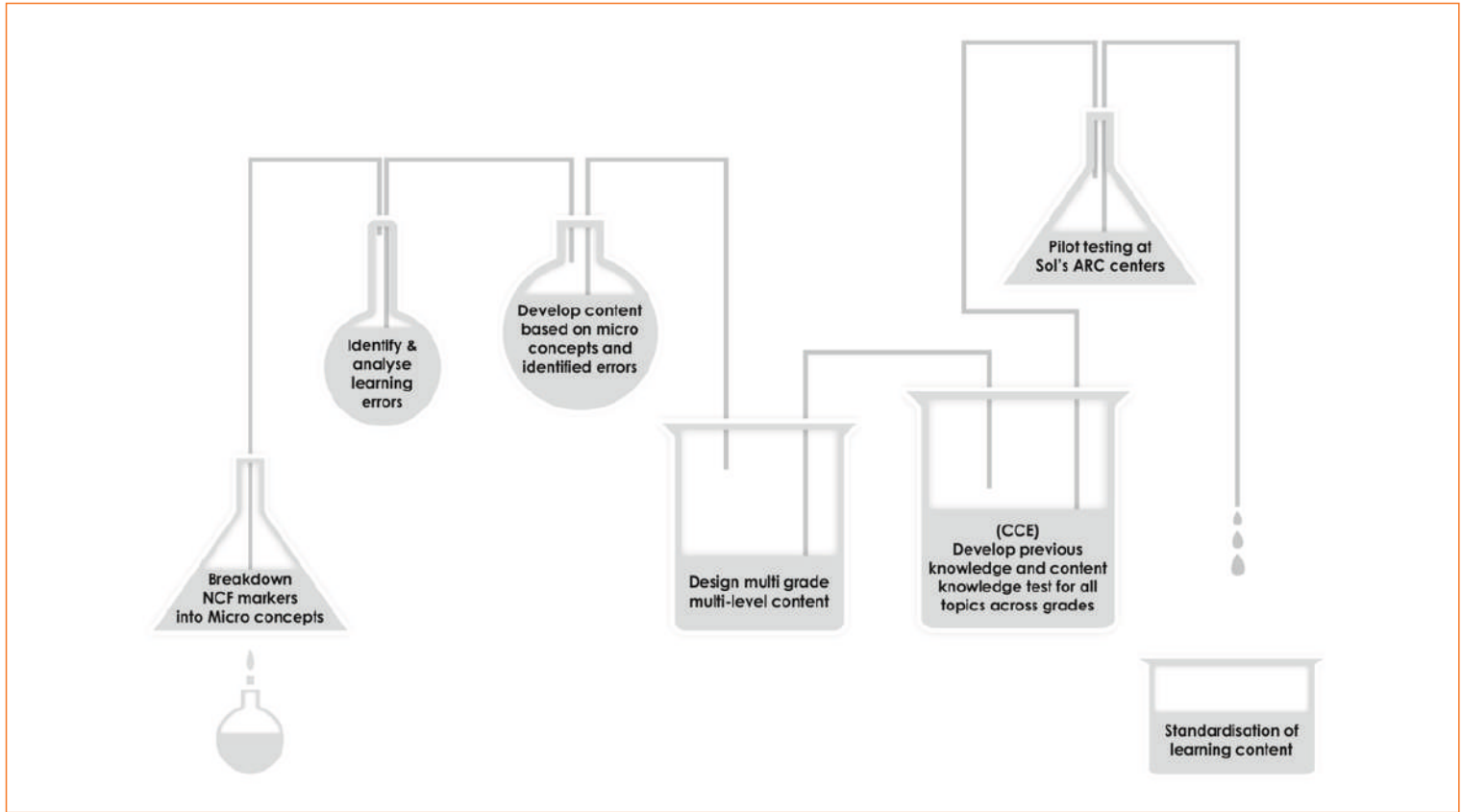
2 Understand why learning lags exist

- Manual and app based Screening tool to identify learning issues due to Demographics, Disabilities & Socioemotional needs.

3 Apply inclusive learning solutions

- Inclusive remedial content to address learning lags
- Integrated Whole child curriculum to address Socioemotional needs
- Sensitization modules and Database of current Govt. schemes & accommodations to address needs of the vulnerable* population.

Development of Special Edge Pedagogy



Partnership Model

Sol's ARC partners with education organizations for 3 years to build capacity of an organization to develop, and implement and scale the program.

Year 1



Year 2



Year 3



Partnership Model

Sol's ARC supports and builds capacity of partner organizations through the following activities-

Program Review
(Of current program)

Need Analysis &
Program Design

Baseline Assessment &
Analysis

Decision between
Remedial or
Full School Program

Teacher & Operational
Team Training

Customized operational &
Monitoring Tracker
development

Customized Inclusive
learning program
(Literacy & Numeracy)

Assessments & data
Analysis to aid teachers
make program decisions

Program Implementation
Monitoring & Handholding

End line Assessment

Second & Third Tier
Intervention
(Small Group & Individual
Plan)

Screening for identification
of causes for learning
lag at last tier

Impact Evaluation



Special Edge Partners



Educate Girls is Sol's Arc's largest partner so far and reaches out to over two lakh children in rural Rajasthan and Madhya Pradesh. This is our third year of partnership with them. Sol's ARC built inclusive learning content called the "Gyan Ka Pitara" which is now being implemented in 13 districts of Rajasthan & Madhya Pradesh.



Sol's Arc partners with Guardians of Dreams to improve learning outcomes of a 125 children living in orphanages and shelter homes. Guardians of Dreams is an NGO based in Bangalore working to provide quality life outcomes to children living in orphanages and shelter homes.



Sol's ARC partners with Teach for India to provide inclusive solution to improve learning outcomes of children in 60 MCGM schools in Mumbai thus reaching out to over 2500 children through this partnership this year.

Special Edge Partners



Sol's Arc partners with Atma who provide strategic solutions to help education NGOs scale. Atma works on improving quality and access in education. We work with Atma partners under a special needs cluster thus catering to around 65 children with disabilities.



Educo is an NGO located in Central Mumbai and managing a school in partnership with the MCGM under the School Support Program at the 'Saibaba path Mumbai Public School', Parel. Educo works with around 800 children. Sol's ARC has partnered with Educo with an aim to improve learning outcomes of children in their school.





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Sol's ARC Intervention with Educate Girls

Learning Content



Trainings & Capacity Building



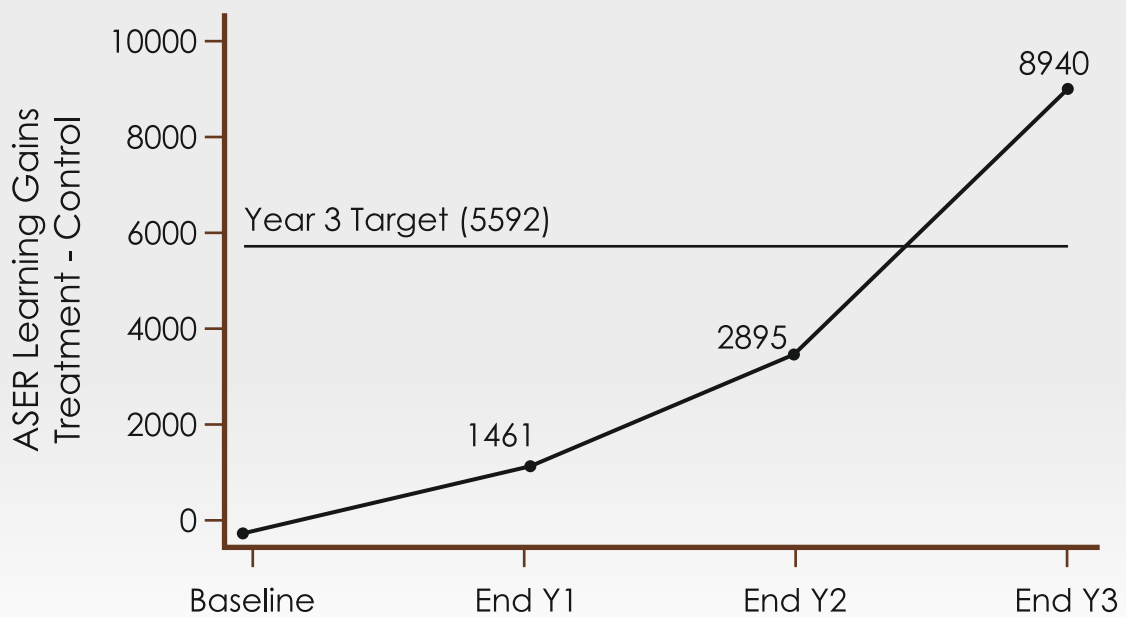
Learning Content



Learning Outcomes

Sol's ARC was a part of the World's first Development Impact Bond (DIB) through our partnership with Educate Girls and an external RCT showed **extraordinary learning gains of 79% in literacy & numeracy** after our intervention with 15000 children in rural Rajasthan which is equivalent to almost one year of additional learning. Similar learning gains have been obtained through internal assessments with our other partners.

Aggregate ASER Learning Gains (Treatment - Control)

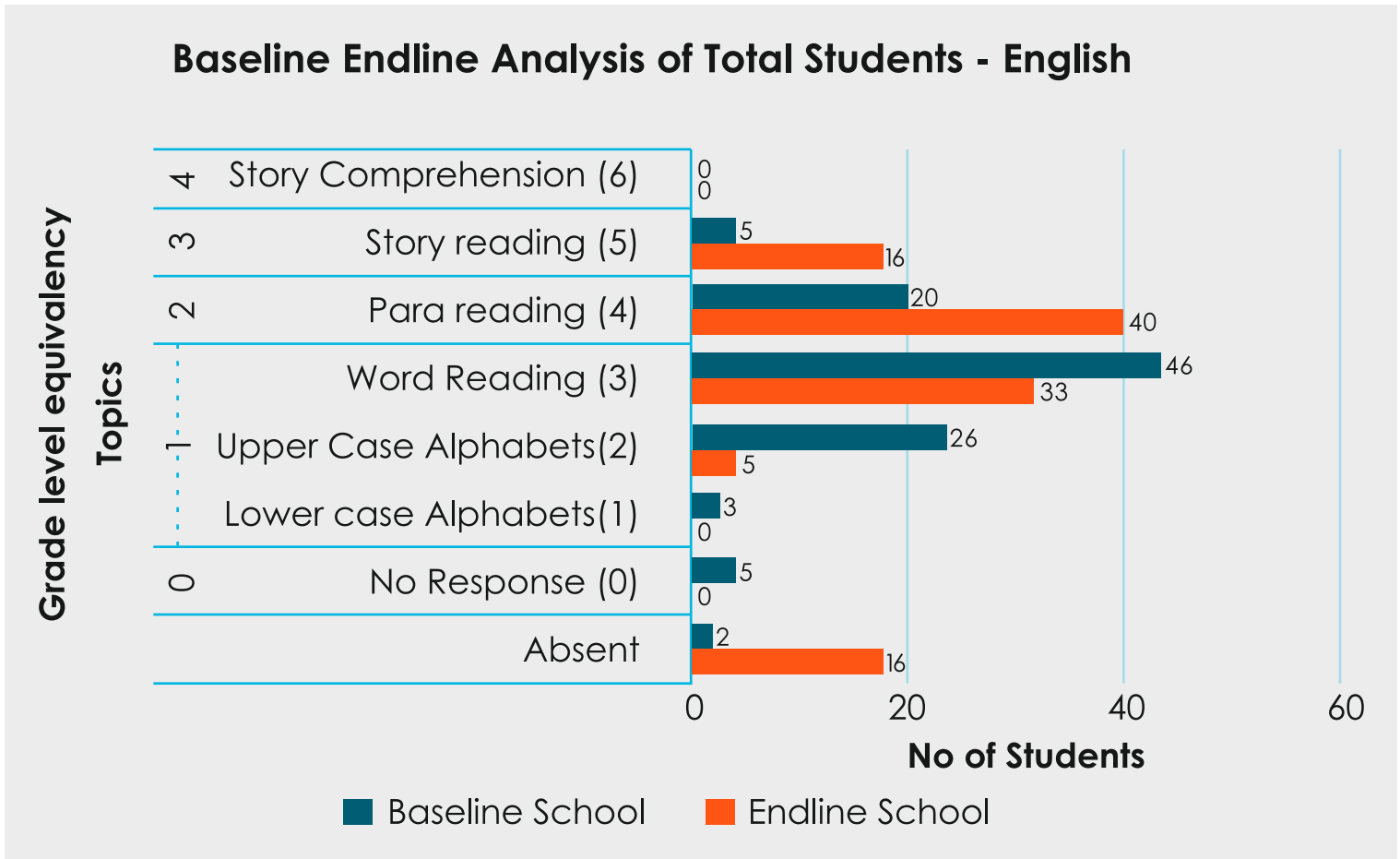


Number of Team Balika's Trained- 50
Number of master trainers trained- 50
Number of Children Impacted (DIB)- 15000
Number of children using GKP (2019-202) –100000
Number of Schools using GKP- 3000
Geographical Area - Rural Rajasthan & Madhya Pradesh

Sols Arc partners with Guardians of Dreams to improve learning outcomes of a 125 children living in orphanages and shelter homes. Guardians of Dreams is an NGO based in Bangalore working to provide quality life outcomes to children living in orphanages and shelter homes. Every sixth child in the world lives in India as the country is home to the world's largest child population of 435 million.

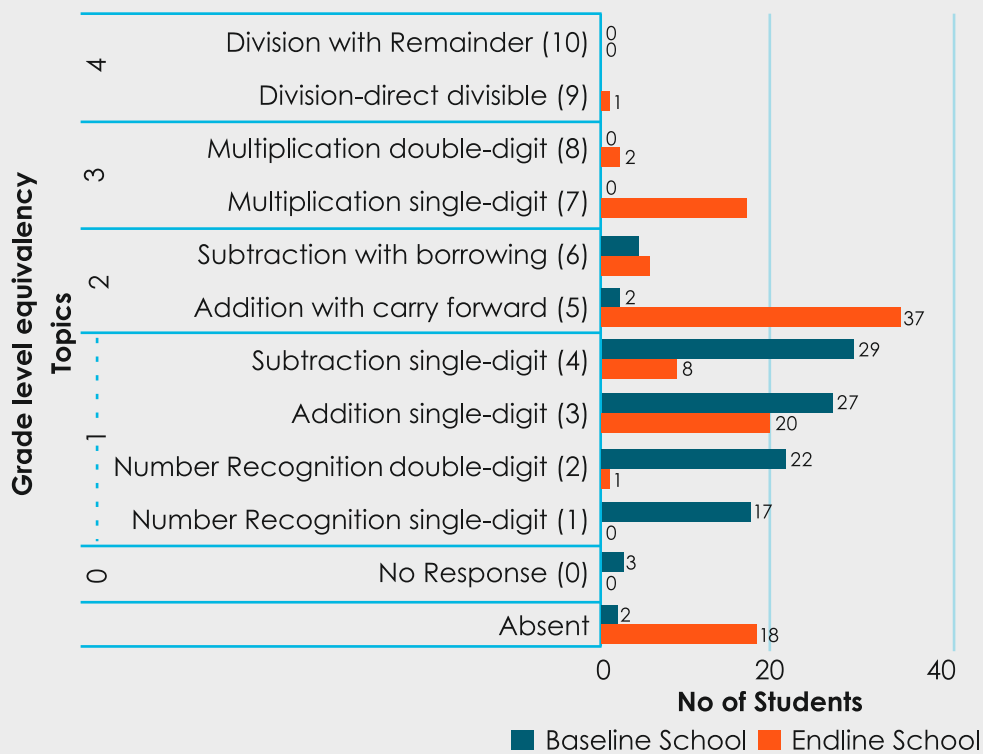
However, 40% of India's children are in need of care and protection; with the country topping the charts on various risks relating to abuse, child labour, child marriage, neglect etc.

Results of Sol's ARC Intervention with Guardians of Dreams



BASE LINE	END LINE
4.76% children were at No response 2.86% children were at lower case	No students at 'No Response' and 'Lower case Alphabet' level.
Maximum students (43.8%) were at Word Reading level at baseline.	At end line maximum students are at Paragraph Reading level. (42.5%)
4.7% children were at story reading level	3 times more students (17%) are now at Story Reading level as compared to the baseline

Baseline Endline Analysis of Total Students - Maths



Levels

- Division with Remainder (10)
- Division-direct divisible (9)
- Multiplication double-digit (8)
- Multiplication single-digit (7)
- Subtraction with borrowing (6)
- Addition with carry forward (5)
- Subtraction single-digit (4)
- Addition single-digit (3)
- Number Recognition double-digit (2)
- Number Recognition single-digit (1)
- No Response

BASE LINE	END LINE
0 students were at the top 4 level at the baseline. (Multiplication & division)	At the end line 21.7% of children have now moved to 3 of the top levels.
40% of the students were at the bottom 3 levels	At end line only 1.1% students are left at this level.
60% of children were able to do addition and subtraction	17% increase in the number of students who can now do Addition and Subtraction ((77%))

Number of Volunteers Trained- 30

Number of master trainers trained- 2

Number of Children Impacted - 125

Geographical Area- Bangalore



Sol's ARC partners with Teach for India to provide inclusive solution to improve learning outcomes of children in 60 MCGM schools in Mumbai thus reaching out to over 2500 children through this partnership this year.

Teach for India through their Fellowship program, provides an opportunity to India's brightest and most promising individuals, from the nation's best universities and workplaces, to serve as full-time teachers to children from low-income communities in some of the nation's most under-resourced schools.

Each Fellow is assigned a classroom in one of Teach For India's placement cities, and charged to teach academics, values and mindsets and to give their students the access and exposure they need to reach their personal, long-term visions.

Sol's ARC Intervention with Teach for India

Sol's ARC began the partnership with Teach for India to improve learning outcomes in math for all children in grades 1 to 4. The inclusive learning content was provided to TFI and their fellows underwent a training to implement the Special Edge program. Data was also analyzed to present the baseline for 2000 students.

Status of the Program



The program implementation was not successful in this specific partnership due to the following reasons

1) TFI is a fellow driven organization and they don't have a centralized processes or a uniform learning program policy.

2) Their operational support for the program was minimal and coordinating with fellows became a challenge.

The program was therefore mutually discontinued and no outcome measurement was conducted.

Number of Fellows Trained- 60

Number of Children Impacted - 2000

Geographical Area- Mumbai

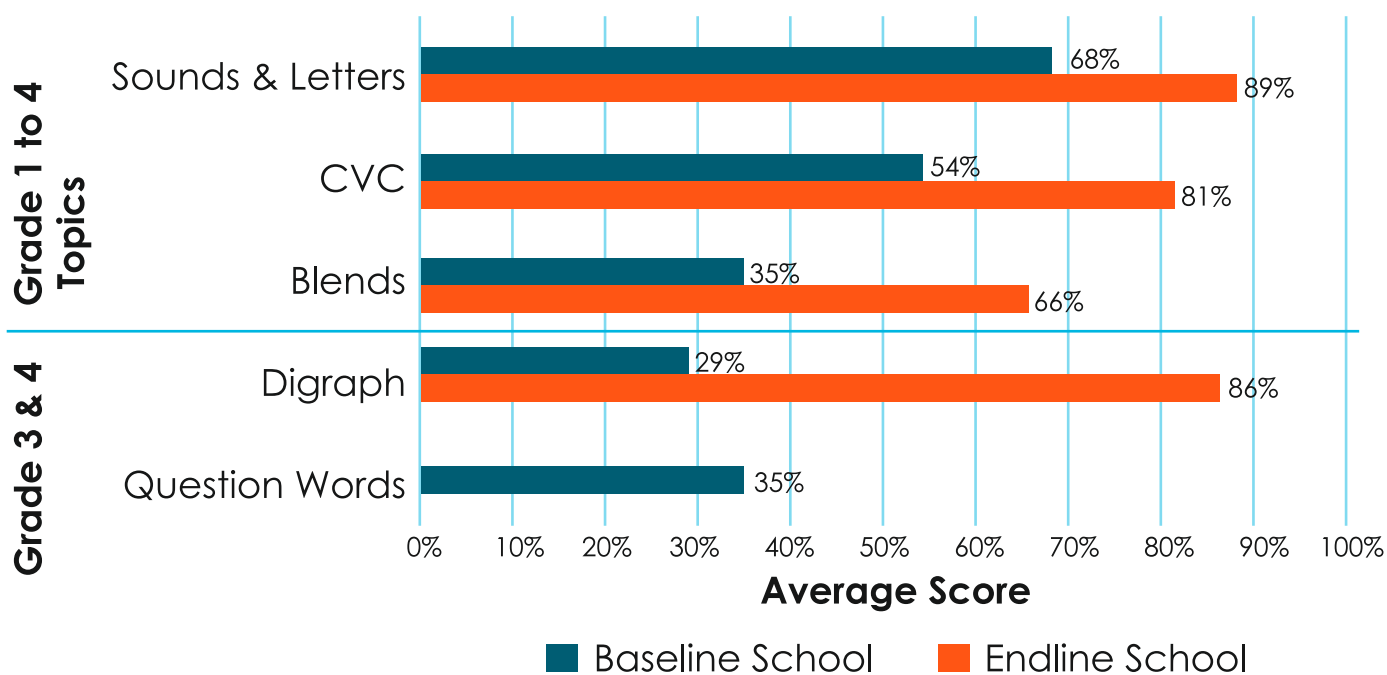


Educo is an NGO located in Central Mumbai and managing a school in partnership with the MCGM under the School Support Program at the 'Saibaba Path Mumbai Public School', Parel.

Parel (Lalbaug) grapples with poverty and under-development, amidst the development and boomtown high rises surrounding it. This area is among the least literate communities in Mumbai. Educo works with around 800 children. Sol's ARC has partnered with Educo with an aim to improve learning outcomes of children in their school.

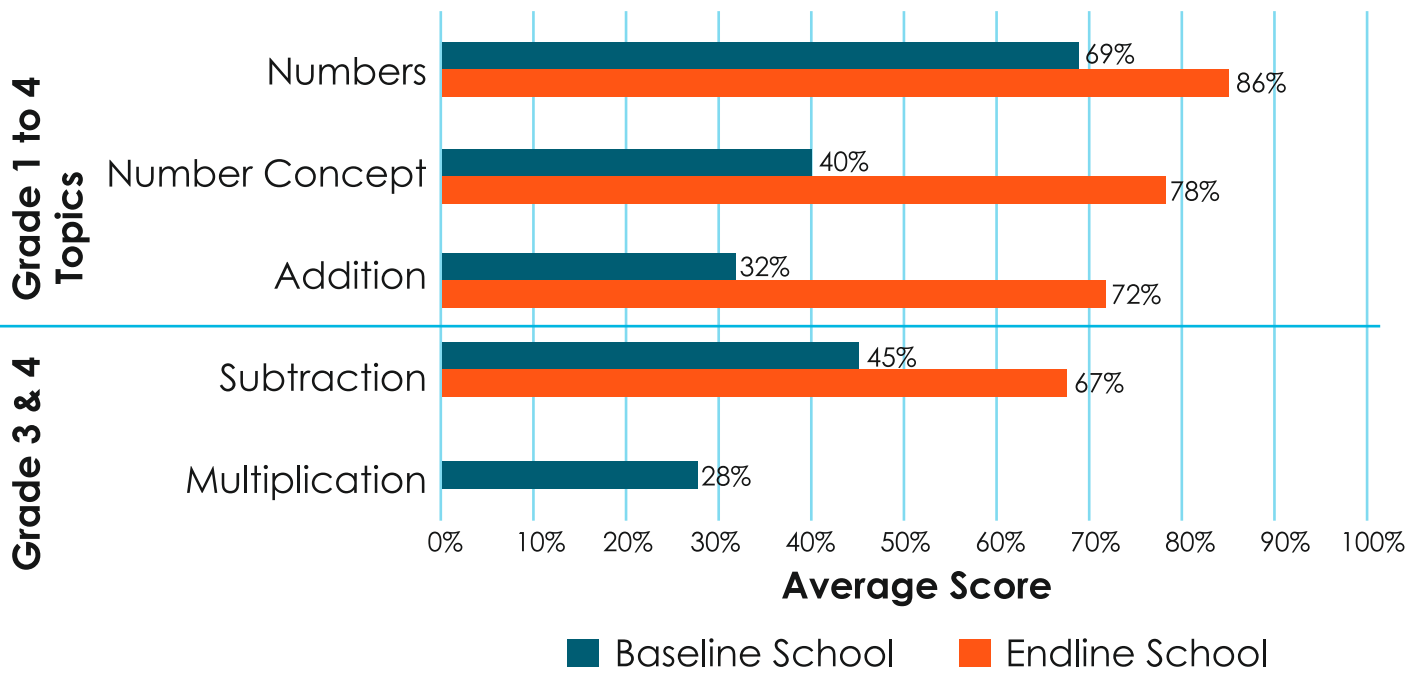
Results of Sol's ARC Intervention with Educo

Learning Outcomes for English



BASE LINE	END LINE
Only 68% of children from grade 1 to 4 were aware of sounds of letters	At the end line 89% of children are now aware of the letter sounds
Only 29% of children in Grade 3 & 4 were aware of digraph sounds	At end line 86% of children could read digraph words
35% of children in grade 3 & 4 could comprehend question words	The end line was not conducted as the children were yet to complete the module.

Learning Outcomes for Math



BASE LINE	END LINE
Only 40% of children from Grade 1 to 4 were aware of Number concepts	The post test shows a 38% growth in outcomes for number concepts
Only 32% of children from grade 1 to 4 were able to do addition.	At end line a considerable gain of 42% is seen in addition.
Only 28% of children in Grade 3 & 4 were able to do multiplication	The end line score for multiplication was not received as the module was not completed.



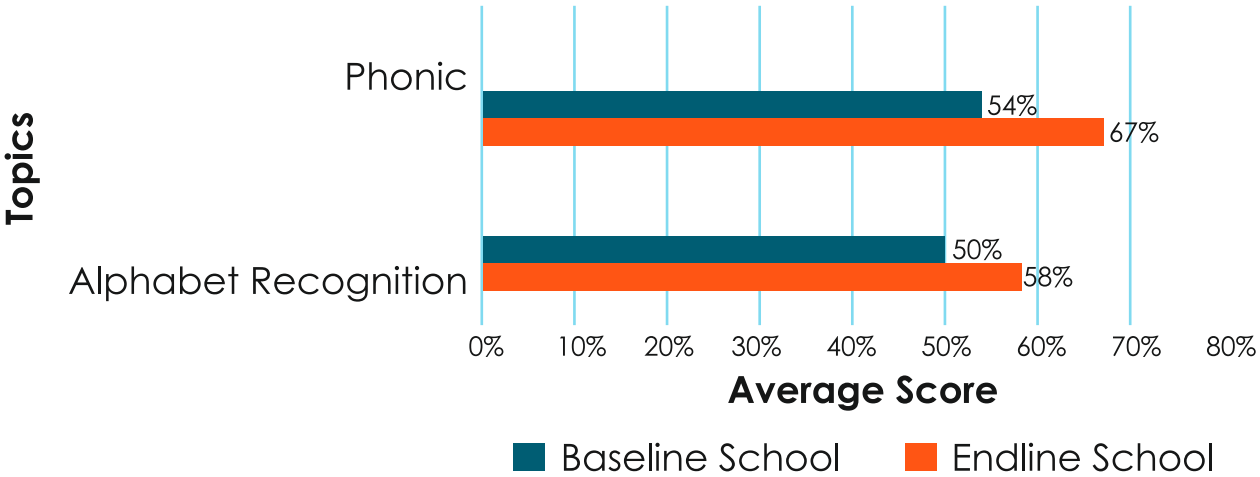


Sol's Arc partners with Atma to work with NGO's working with children with multiple disabilities in Mumbai. The cluster consists of two dynamic special needs schools- Little Hearts and Anandi who work on improving the lives of children with a range of disabilities like Autism, Cerebral palsy, intellectual disabilities, learning disabilities etc.

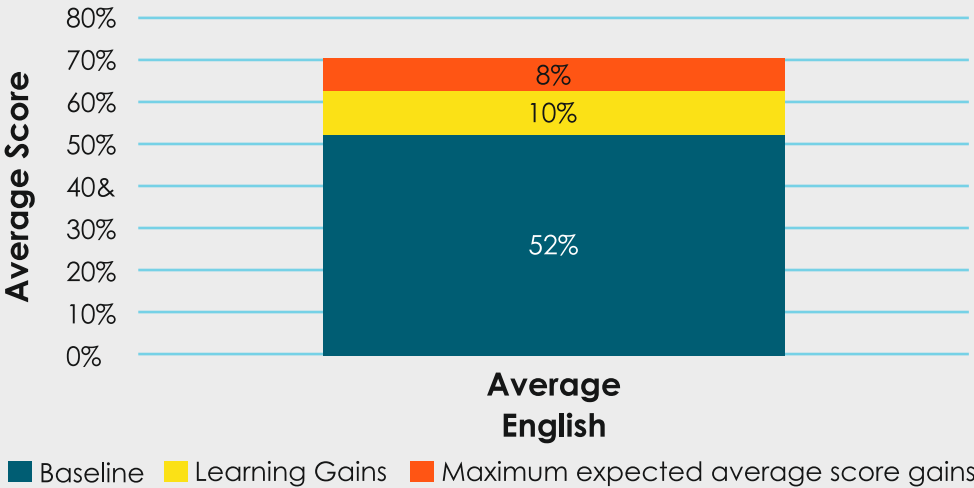


Results of Sol's ARC Intervention with Anandi-

Learning Outcomes for English

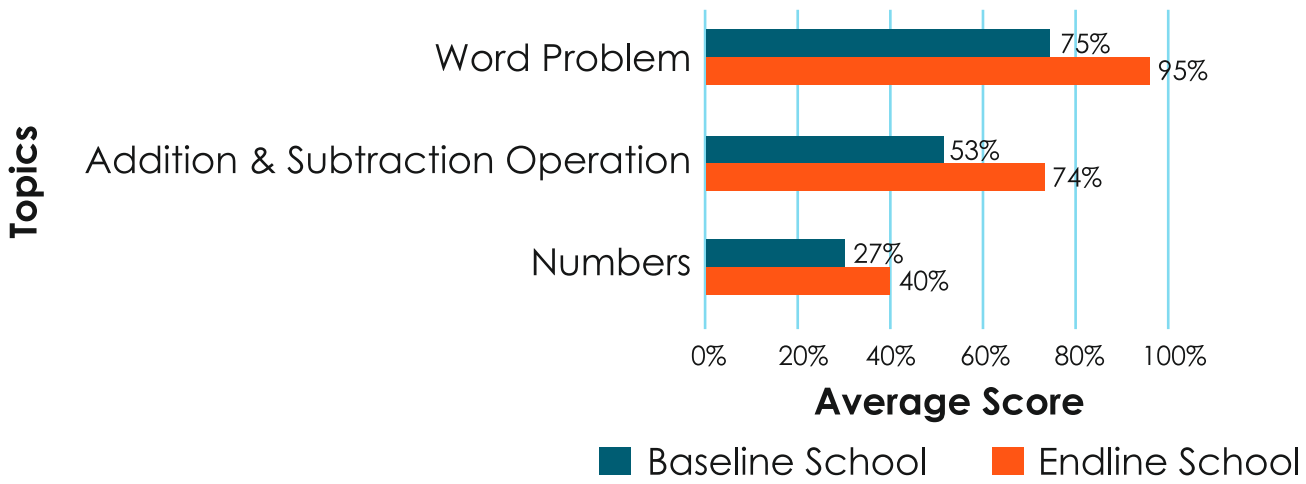


English Learning Gains

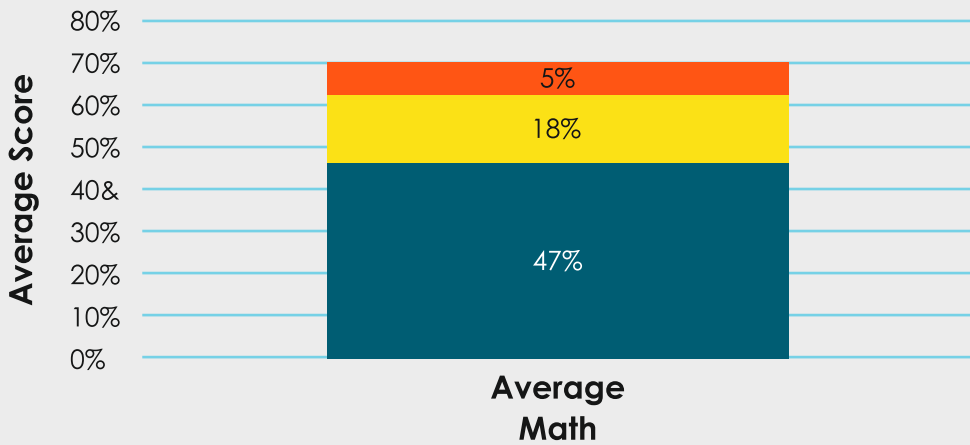


Children across different levels in the school showed an average growth of 10% in English

Learning Outcomes for Math



Math Learning Gains



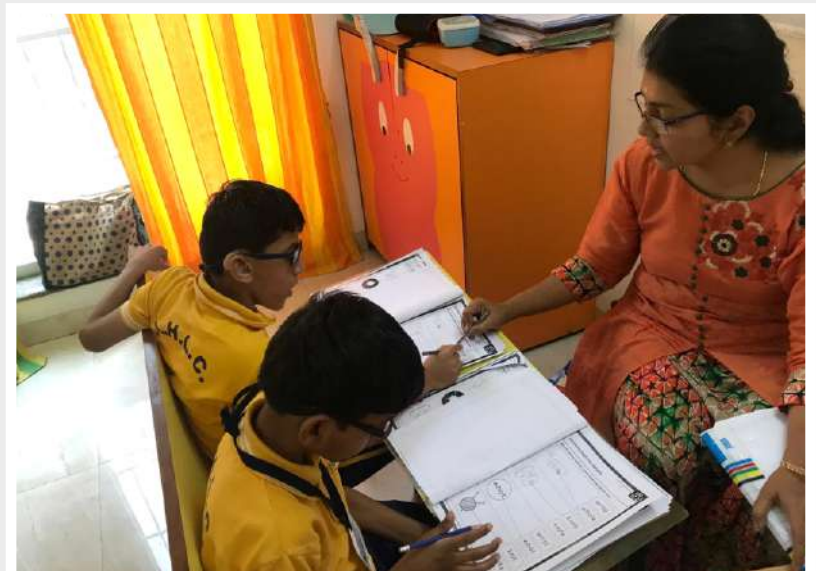
Children across different levels in Anandi school showed an average growth of 18% in Math

■ Average of BKT BASE LINE in % ■ Learning Gains ■ Maximum expected average score gains

Number of Teachers Trained- 6

Number of Children Impacted - 30

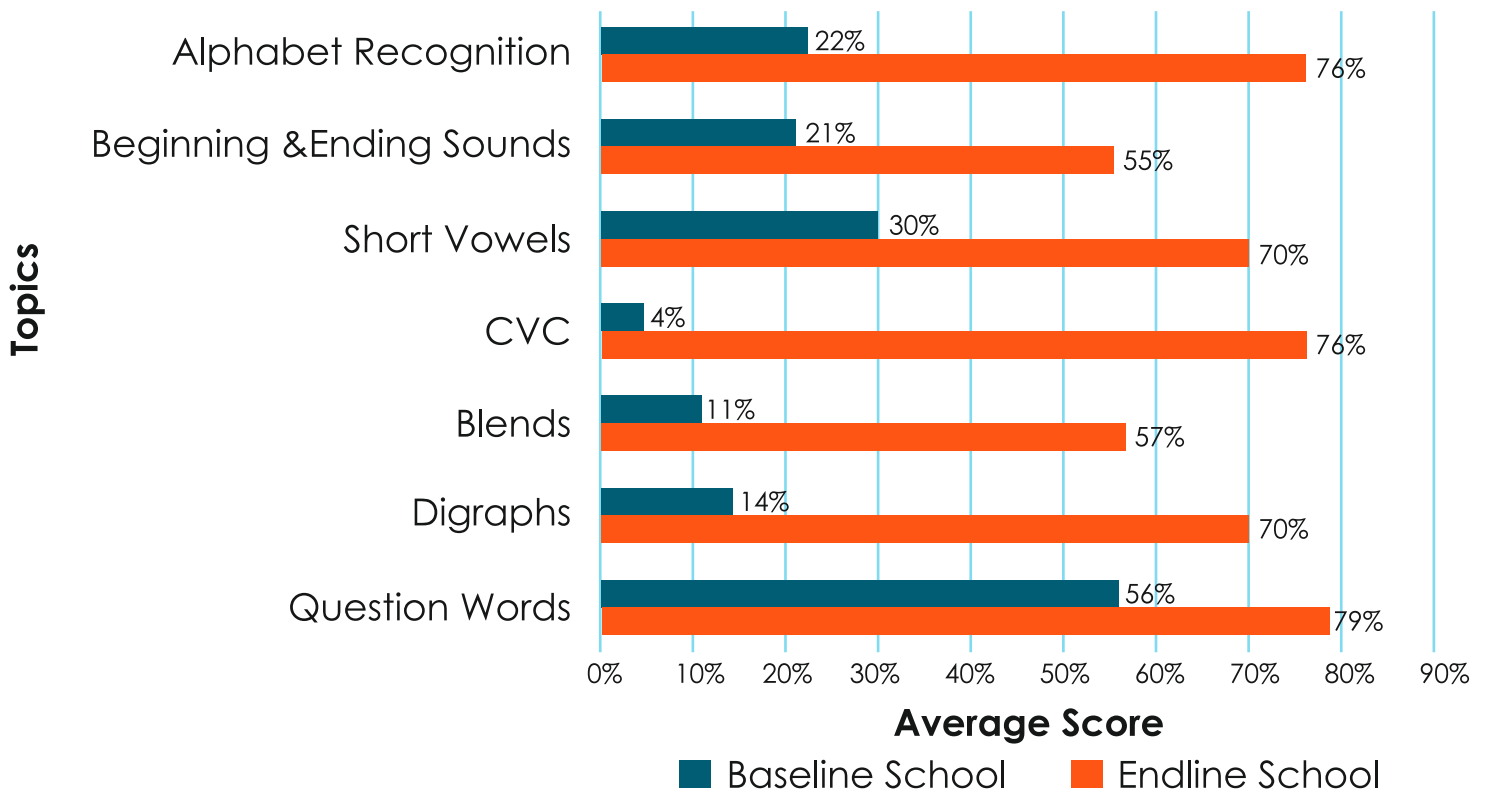
Geographical Area- Mumbai





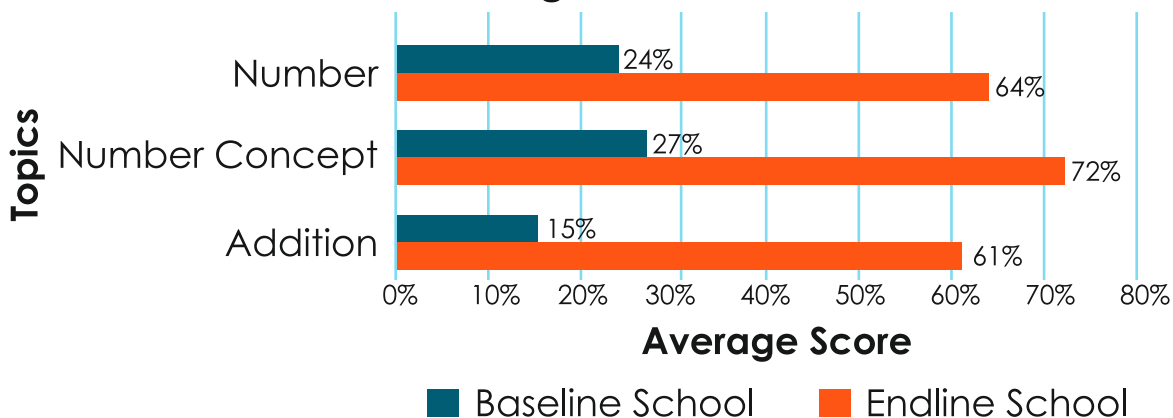
Results of Sol's ARC Intervention with Little Hearts-

Learning Outcomes for English



Children across different levels in Little hearts Centre showed a considerable average growth of 44% in Math and of 47% in English.

Learning Outcomes for Math



Number of Teachers Trained- 8

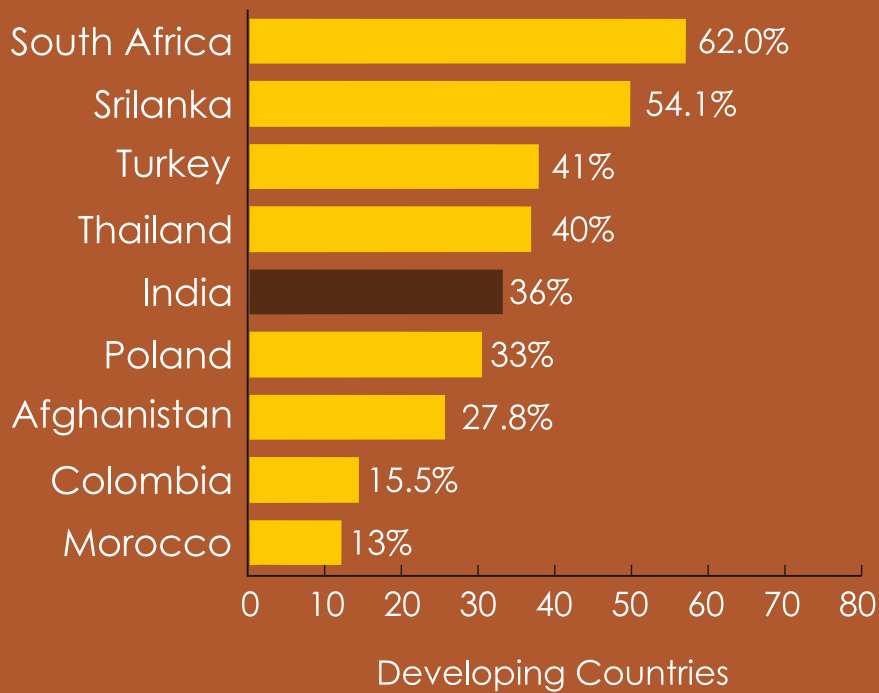
Number of Children Impacted - 35

Geographical Area- Mumbai

Glimpses of Trainings & Observations with all our partners-



Global PWD Employed



According to the census 2011, India has about 26.8 million or 2.68 crores of 'Persons with Disabilities' of which people from the age group of 15-59 years were non-workers or marginal workers.

Currently, there are many interventions available for persons with disabilities in India but they all mostly focus on persons with physical/speech/hearing impairment.

Less than 90% of young Adults with Autism and Intellectual disabilities (ID) are employed in India today.

According to Census 2011, out of 23, 19,50, 671 young adults from the age group of 15 – 24 years living in India, 81 lakhs young adults are having Autism & Intellectual Disabilities (ID)*

90% of PWD with Intellectual Disabilities & Autism unemployed

Sol's ARC Solution

Job Mapping

To map potential jobs for Autism & ID in open employment

Adaptive Curriculum

Build industry standardized & certified adaptive training curriculum

Pilot at Sol's ARC

Pilot industry recognised courses developed at Sol's ARC model center

Employment & Sensitization

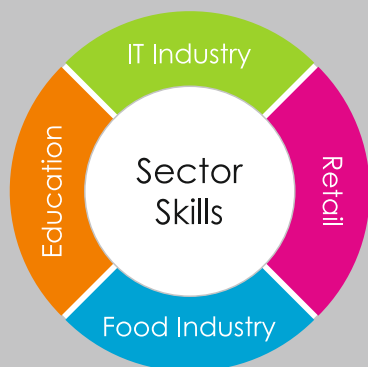
Providing job placement and support to PWD & creating employee awareness

Scale through partnerships

Scale the program across vocational centres in India through Train the Trainer Model

Job Mapping

Sol's Arc will continue to map jobs across 4 sectors to find appropriate opportunities in these sectors.



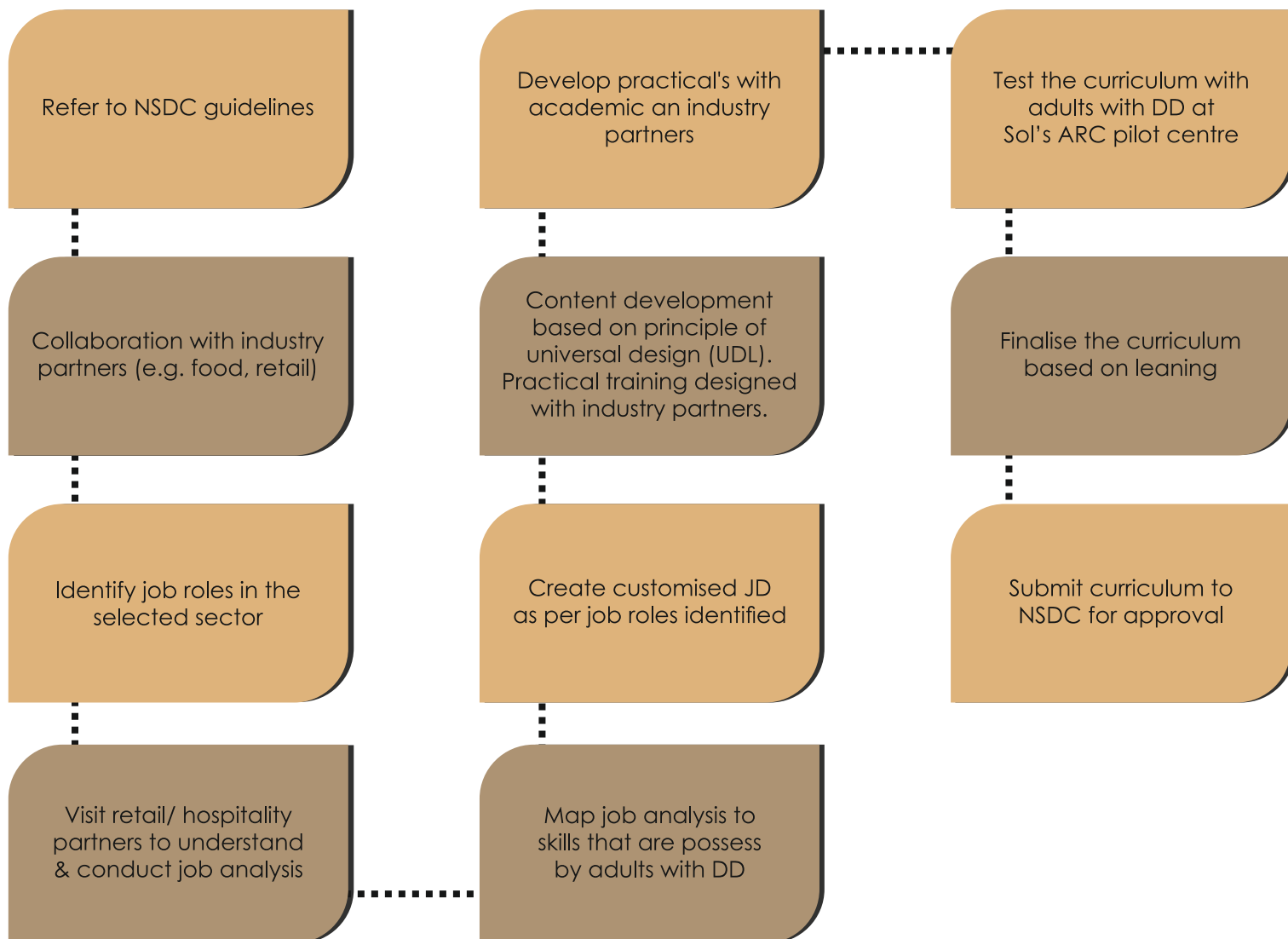
Job Mapping Partners

Adaptive Curriculum



Sol's Arc has developed an extensive process to adapt curriculum to make it appropriate to the training needs of adults with Autism and Intellectual disabilities.

Process of creating Adaptive Curriculum



Pilot at Sol's ARC

Sol's Arc has launched India's first Associate Degree course as a higher learning opportunity for adults with Autism and Intellectual disabilities.



India's **1st** Associate Vocational Degree Program
For special needs adults

Pathways is a 3-year Associate Vocational Degree Program with academic and industry certification, providing a career path for young special needs adult.

Number of young adults enrolled- 15
Geographical Area- Mumbai

Source: <http://www.compassiana.com>

2nd year journey at Glance



June 2018 - 2nd batch of Pathways began their Hospitality sector training at ITM for academic session 2018 – 19. Students received practical training



November 2018 - Sols arc had a memorable visit to Lemon Tree hotel Delhi where we witnessed the wonderful integrated set up of the employees with special needs. This was great opportunity to learn about their excellent sustainability and innovate initiatives for special needs.



December 2018 - Pathways II year batch successfully passed their IT- Ms office exam conducted by Hrishi Computer Education. Students received certificates from Ms. Surekha Bhosle, Head of Hrishi Institute



January 2019 - Sol's Arc presented the Quite Hours initiative at the TRRAIN Retail conference. Lots of learning from various organizations like Big Bazaar, Star Bazaar, PVR, D'Mart etc.



March 2019 - Pathways II batch successfully completed their first internship at Sai palace and Park view hotels. This was the first on the job training experience for students and also an opportunity to practical experience of hotel management training.



April 2019 - Sol's ARC collaborated with Big Bazaar to provide first internship program for young adults at the Retail

Employment & Sensitization

Sol's Arc conducts Employee sensitization programs with various corporate partners that we engage with. This year we trained more than 250 employees with Big Bazaar, Sai Palace and Park View Hotel.



Sol's ARC partners with Big Bazaar for India's 1st Autism Quiet Hour

Sol's ARC partnered with Big Bazaar for India's 1st Quiet Hour initiative aimed at helping people with Autism have a calmer and quieter shopping experience.

Big Bazaar Matunga store went silent for an hour to give sensory friendly shopping experience for people with autism. We scaled this initiative across 16 cities by collaborating and training 16 NGO partners.



Scale through partnerships

Sol's ARC aims to scale the initiative in 2021 through partnerships with various organizations across the country.

