

# VIDYA Mumbai Digital Empowerment Program Annual Report 2018-19 to PWC

## Problem Statement

VIDYA is trying to address the lack of quality education and empowerment opportunities for the lesser privileged children and youth in urban slum communities through holistic education programs. VIDYA runs integrated programs for Beyond School Learning, Open School education and employability courses for youth.

## NGO Details

**Name:** VIDYA Integrated Development for Youth and Adults

**Project Name:** Digital Empowerment Program

**Location:** Chaitanya Nagar Powai, Mumbai

**Reporting Period:** Apr '18 to Mar '19

## Project Objective

- Provide Digital Literacy to children, youth and Adults
- Create Employment opportunities to youth and young adults through Digital skill development

## Executive Summary

- Major event happened in this year is the Technology Fair
- DEP participated in STEAM Fair of Beyond School Program
- DEP partnered with Antarang Foundation and Global Talent Track for the Career Ready Program for the youth of short term courses.
- Introduced Project Based Learning (PBL) in this academic year for the Digital Literacy program of Beyond School.
- Class 9 students underwent training in C++ through TCS CSR Launchpad module and certified by them.
- 307 children underwent Digital Literacy training and 149 youth underwent training on certification courses.

## Highlights

### Tech Fair 2019:

**Theme:** Making & Learning through Emerging Technologies

#### Focus:

The four C's of 21<sup>st</sup> century learners are Creativity, Critical Thinking, Collaboration and Communication. VIDYA DEP focuses on project based learning approach to introduce the new technological concepts to the young students.

For Technology Fair 2019, VIDYA collaborated with 'Maker Ghat', a non-profit community makers pace at Powai, Mumbai.

#### Summary:

- To motivate the youth of the community in the Making and Learning of Emerging Technologies, following projects were exhibited by students and teachers.
  - **Low cost Raspberry PI Computer**  
This project was made with an attempt to provide the community with an alternative computer which is low in cost and powerful made with the technology of raspberry Pi.
  - **XY 2D Robotic Plotter**  
XY 2D robotic plotter is a DIY project made using the Arduino UNO board. This Robotic plotter has also used the 3D printer technology for printing the Gondola and the mounting bracket used in the model.
  - **Automatic Light Controller**  
This project is all about controlling the power consumptions at the streets. It can control a circuit of street lights with specific sensors, LDR and Microcontroller during day and night.
  - **Low cost CCTV Camera**  
This process uses the Raspberry Pi technology to create an affordable CCTV camera which can be used for CCTV purpose
- To introduce innovative technologies for the school students, a workshop is conducted to introduce the working of simple Internet of Things (IOT) applications on Arduino.

- During the VIDYA intervention at school, the children learnt
  - Designing Tools like Tux tools, MS Paint, Inkscape, Adobe Spark and GIMP, MS office, Programming Tools like Logo, Scratch, HTML, C++
  - To introduce project based learning approach, assignments & projects are given while learning any digital tool. The children did the projects in group and those projects are exhibited during the Tech Fair.
- To empower women with useful digital technology, a regular intervention of Digital Literacy happens at Tailoring courses at Margam, Women Empowerment Program.
  - Workshop on Digital Book Creation is conducted during Tech Fair
  - Created Digital Product Catalogue



## STEAM Fair:

STEAM Fair was designed to be a platform developed by the students for the students of the Beyond School program to convert their textual knowledge into practical application. STEAM stands for the integrated approach of learning in Science, Technology, Engineering, Arts and Math.

Digital Literacy is an intervention to Beyond School Program of VIDYA. As a technology component during STEAM Fair, class 8<sup>th</sup> and 9<sup>th</sup> students of Beyond School - Chaitanya Nagar, created a website on the STEAM Fair projects displayed, using HTML ( part of Digital Literacy Curriculum).



## Career Ready Program:

The step towards DEP's plan of creating employment opportunities is partnership with Antarang Foundation, an organization works for identifying and building the youth career ready.

The Career Ready Program flow:

- Facilitate a process of self-discovery, introduce various careers, and facilitate an informed career choice and a coherent career plan.
- Train them in core employability skills, connect them to career opportunities and mentors who will guide
- Advocate for them through the first year of their careers.



#### Methodology of the Career Ready Program:

- Career Ready Program has classroom-based training covering five modules that are Self-Awareness, Career Awareness, Work Skills, Work Ethics and Business English.
- All of the above is done through a variety of interactions with industry –through activities, projects, case studies, expert speakers and exposure visits.
- A batch of 20 students attended an intensive 45 days program and 9 students who are regular will get graduated in the first week of April 2019.

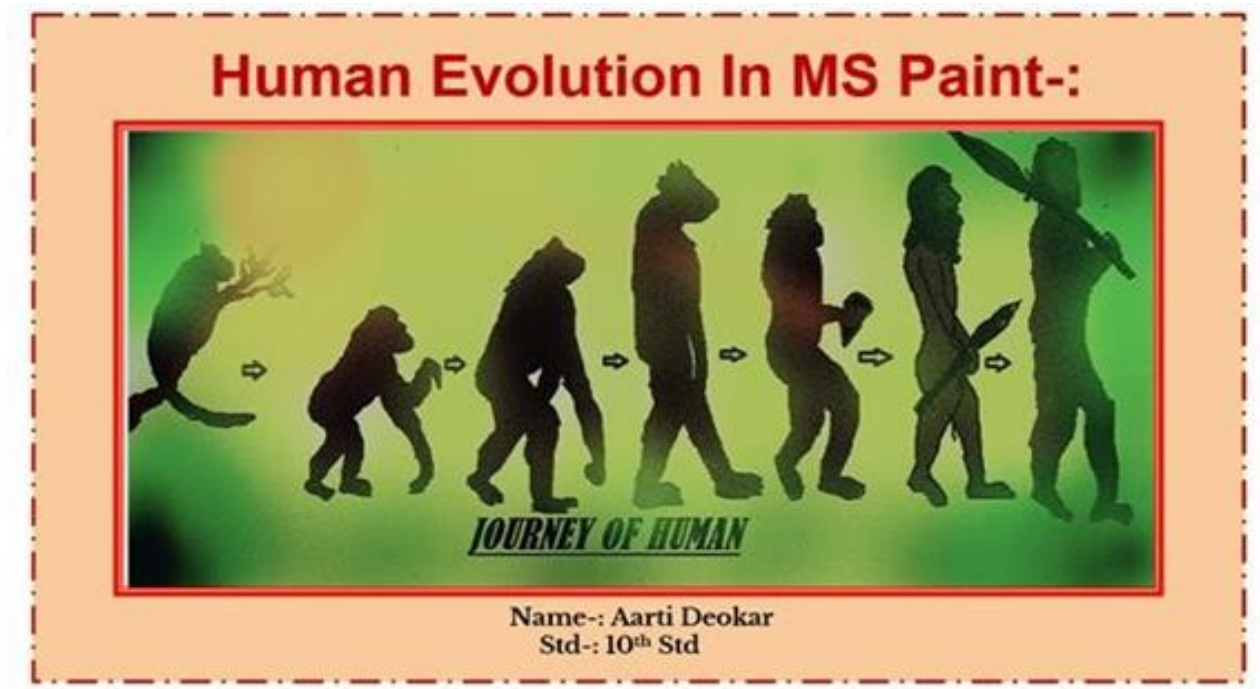


### **PBL implementation:**

This PBL approach inculcates the 4 core 21st century Skills like Communication, Collaboration, Critical Thinking, Creativity.

Project Based Learning approach is introduced in the Digital Literacy curriculum of Beyond School. The students will do assignments and projects related to their core academic subject while learning any Digital Tool. Below is an example of 'Human Evolution', which is a topic in history done as a project by BS students. Aarti Deokar and her 3 friends did this project using MS Paint (draw the picture), MS word to create project wherein they used the self-drawn picture, collected more

information about the topic from internet and translated the information in Marathi using Google Translator. The children attempted to present the project too.



## C++ Certification:

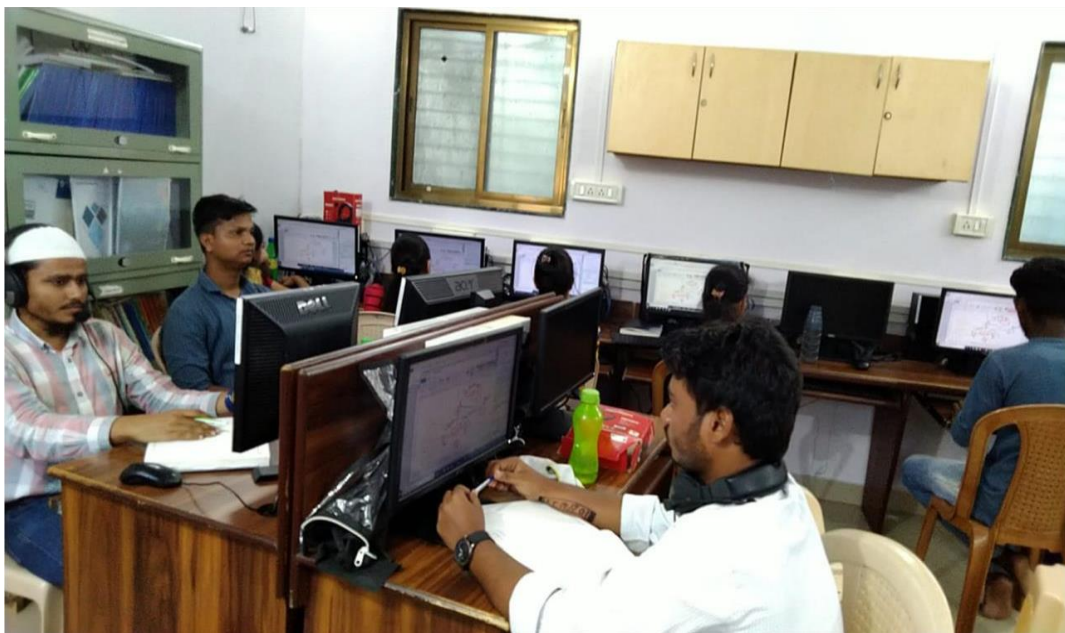
There is a growing understanding that knowing how to program is essential, especially for younger generations. It is technical skills that will enable children to succeed, and that set of skills must include programming. Understanding this, we have included C++ in our curriculum of Beyond School. 9th Std students learnt C++ basic concepts like Flowcharts, Algorithm and how to do coding in Turbo C++ platform through Launchpad a platform created by TCS CSR, our knowledge partner. This introduces programming skills to students through different videos in a very simpler way. After learning these C++ curriculum successfully students got certificates from LaunchPad TCS which helps to motivate students to continue doing programming languages.



## **Skill up gradation of Trainers:**

### **IOT (Internet of Things)**

The Internet of things (IOT) is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect, collect and exchange data. NIIT foundation, the knowledge partner conducted a webinar for the DEP Senior trainers.





## DTP (DeskTop Publishing)

To introduce advanced level courses at DEP, eight trainers of DEP are undergoing DeskTop Publishing (DTP – Photoshop, CorelDraw, and Illustrator) in an Institute at Powai. The trainers, who are from commerce and arts background has been working with VIDYA for more than two years and are handling Digital Literacy to children, Basic IT and Tally courses. 80% of the program staff are also our alumni.

## Volunteering Impact

### Adobe workshop:

Team Adobe conducted a workshop on 'Design Basics'. Just in two hours of time students learned to make Digital Posters & webpages using 'Adobe Spark'. Using this tool student could transform their ideas into visual stories. This was followed by introduction of an Adobe AI tool, which could replicate each child in cartoon form in real time. For all the participating students, these two hours were truly informative.

Team Adobe conducted a 'Digital On-boarding' workshop for the youth of employability courses.

The session flow was as below, followed by Q&A

1. What is digital technology?
2. Who are the key players in digital technology space?
3. Why digital services are free?
4. How do digital companies make money in-spite of offering services for free?
5. How can you leverage digital in personal and professional life?
6. Career opportunities in digital for you







## Mentoring Program:

Mentorship can be a significant part of your overall career success. A strong and trusted mentor is someone who can provide one a solid baseline of career support, someone who will keep one grounded, and someone who will help one remain self-aware throughout one's career journey. With this understanding, a mentorship project of senior team members of DEP started from February 2019. They will be mentored by VIDYA's corporate partner, Tata Groups which will cover various soft skills as well as life skills.



## Volunteers - College Students:

Three MBA students from NMIMS College volunteered during STEAM Fair and enhanced the technology projects done by the students. Also they have participated in the preparatory work of Tech Fair like, Making of Tech Fair Invite, Presentation of the projects and an information booklet on the emerging technology projects.

## Exposure visit to Corporates:

Exposure visits are a very important training methodology as it enables the students to experience the real working environment of corporates. Youth students of VIDYA DEP visited multinational finance companies.

In this whole academic year three exposure visits happened

- Resume Writing in Barclay's
- Email etiquettes, Business Management in Tata Cliq
- Financial Literacy in Barclay's

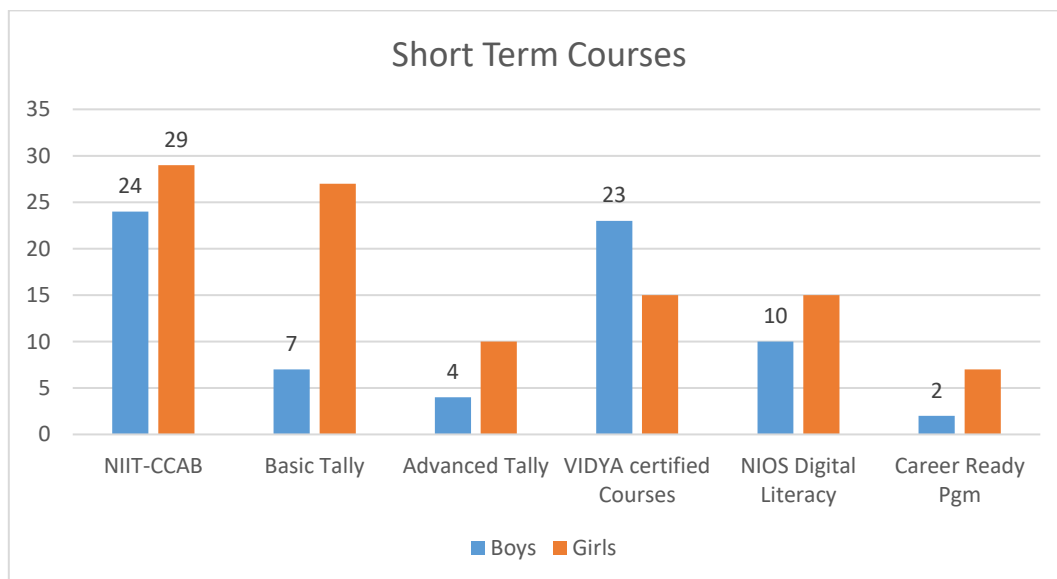


## Impact

### Key Indicators (Number of Students):

Beyond School			
Center Name	Boys	Girls	Total
Chaitanya Nagar(CN)	46	73	119
Indira Nagar(IN)	52	36	88
Gautam Nagar (GN)	29	33	62
<b>Grand Total</b>	<b>127</b>	<b>142</b>	<b>269</b>

During this whole academic year, DEP Chaitanya Nagar provided weekly one hour digital literacy classes to 127 boys and 142 girls from Beyond School Program of VIDYA, which includes students of 3rd to 10th std from Beyond School Chaitanya Nagar, Indira Nagar and Gautam Nagar.





Employability courses which are courses from NIIT Foundation and Tally Academy certified 101 students. 38 children got certified in VIDYA certified MS office and vacation courses. 25 students from NIOS undergone 3 months training on their Data Entry Course. 15 students enrolled for Antarang Foundations Career Ready Program and 9 students got graduated after 45 days intensive training.

## Assessments:

Assessment is an integral part of instruction, as it determines whether or not the goals of education are being met. At VIDYA, students of Beyond School program undergoes Pre, Mid & End term assessments in a year to know their learning level.

### Beyond School Digital Literacy Assessment:

#### Pre-Term Assessments (PTA)

Students from three Beyond School Centers attended pre assessment conducted at DEP CN center from 16th July 2018 to 27th July 2018. In that few of the students were new enrolment at Beyond School Program, hence we had different question papers to assess their computer knowledge.

#### Mid Term Assessments (MTA)

Mid Term, assessment is conducted during November last week for all the classes to assess their learning level.

#### End Term assessment (ETA)

On 16th February 2019 an End-term assessment was conducted for the students of 10th grade to check their learning levels. They have been introduced to project based learning and the assessments are done based on their learning. For other students the ETA was conducted a week later.



## Short Term Courses Assessment:

3 NIIT –CCAB exams were conducted in the year and 3 Basic Tally and 2 Advanced Tally exams were conducted. These exams were conducted online by the respective knowledge partner using their exam portals.



## Certification Programs:

### 1st Quarter Certification

DEP short-term courses' certification program was conducted, with a session on "Anti Bullying" and "cyber safety" to create awareness to the students on these.

### 2nd Quarter Certification

2<sup>nd</sup> certification program was conducted with the value added session on 'Constructive use of Twitter'. It focused on how to use Twitter to connect with various government officials & authorities for public service like Passport Seva, Railways, and Traffic & Law. Along with it, information on important Twitter handles & trends related to jobs, corporate world, and personality development were also shared.

### 3<sup>rd</sup> Quarter Certification

A certification program was conducted with the value added session on with the theme of 'Making of creative Posts'. A workshop on 'Adobe Spark', which is an easy to use online tool to make graphics & and posts was conducted.

After these sessions, the certificates of the employability courses like NIIT Basic IT & Tally were distributed. Students shared their experience of the course and expressed their gratitude towards VIDYA, donor organizations & team.





## Monitoring & Evaluation System:

The beneficiary data of Beyond School (BS) and DEP program are stored in the respective excel based database management system. **The BS M&E database** stores Personal Details, Attendance Details, Assessment Grade Details and Change in Behavioral traits due to Life Skill sessions as rating by teacher. A Journey Card of the child is generated from the system, which shows the outcome of the BS interventions given to the child throughout the year. **The DEP M&E database** stores Personal Details, Course Enrolled, Attendance, Course Completion Details and Alumni Tracking Details. The M&E Data analysis drives the management towards Decision Making on the effort and time put up behind each interventions and the learning outcomes from those. It also gives us an idea about the areas to focus, teacher training required etc.

## Success Stories:



**Mohd Sulaiman Dhulji Chouhan** moved to Mumbai years ago from a small village near Indore, Madhya Pradesh for his livelihood. He always had a quest to learn new things especially computers but could not do so due to family responsibilities. Currently he works in the film industry as a martial arts and gymnastic coach. When he got to know about Computer courses at VIDYA running at a walking distance from his home, he enrolled for it. His passion for learning made him quick in the process and completed NIIT-CCAB course real quick.



**Abhay Upadhyay**, Class 7 Student undergone digital literacy curriculum for the whole academic year. In the beginning, he was not interested to do the assignments. But when we introduced designing tools like Inkscape, he has shown a remarkable interest and started doing all the assignments with more interest.



**Siddhi Tirlotkar**, an alumni of DEP program undergone Job Readiness training in finance sector through DEP's partner 'Global Talent Track'. It was an 25 days training for 6 hours a day. At the end of the training, she was sent for placements and she got selected as Accounts Executive in SYNTEL with the salary of 17000 per month.