project
DEFY
Design Education For Yourself

Progress Report

2016 - 2020

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Hi, folks!

The third year of a non-profit is when it comes out of its infancy and enters its teenage years. It has the support and freedom to try out new things and slowly progress while staying small. This was never an option for us, because 2020 has been the biggest kick so far. We have strongly disagreed with mainstream schooling With the belief that one day the people may see that exams, schools, and teachers are not the only way to learn.

In the last years, we have come quite some distance, creating 16 self-learning spaces in many different contexts, and countries. This year we created a space that we are most proud of in the village of Gahanga in Rwanda (Africa) - our first Nook hub in the African Continent.The Cisco thingQbator program in 6 universities continued for a second year, enabling more university students to explore new ideas and provide new solutions to heal the planet.

With the nationwide and worldwide Covid-19 lockdowns, we were left thinking again about our role as an organization. So we looked where we have always found inspiration abundantly - the communities we worked with.We saw resilience. We saw the learners from the Nooks getting to work, making masks and shields, and no-touch washbasins. We found out how they responded immediately helping their own communities to survive with dignity. So we followed their lead. Our first role was relief, ensuring families had enough to eat and live so we raised funds through generous contributions from our networks and friends.

In the end, I am grateful to our team, that doubled its efforts in the lockdown, putting in their 200%. It is phenomenal to see how individual missions in life can so perfectly align with the collective mission of the organization. There is much more to do, and the rest will not come easy. But we did not start walking, being intimidated by the distance, but by being enamored by the destination. And we are not stopping.

Abhijit Sinha
Founder/ CEO

About Us

Project DEFY enables marginalised communities in Asia and Africa to create their own education through self-designed learning

We create spaces called **Nooks & Nook Hubs** in places like rural villages, urban slums and refugee camps.

Our Vision

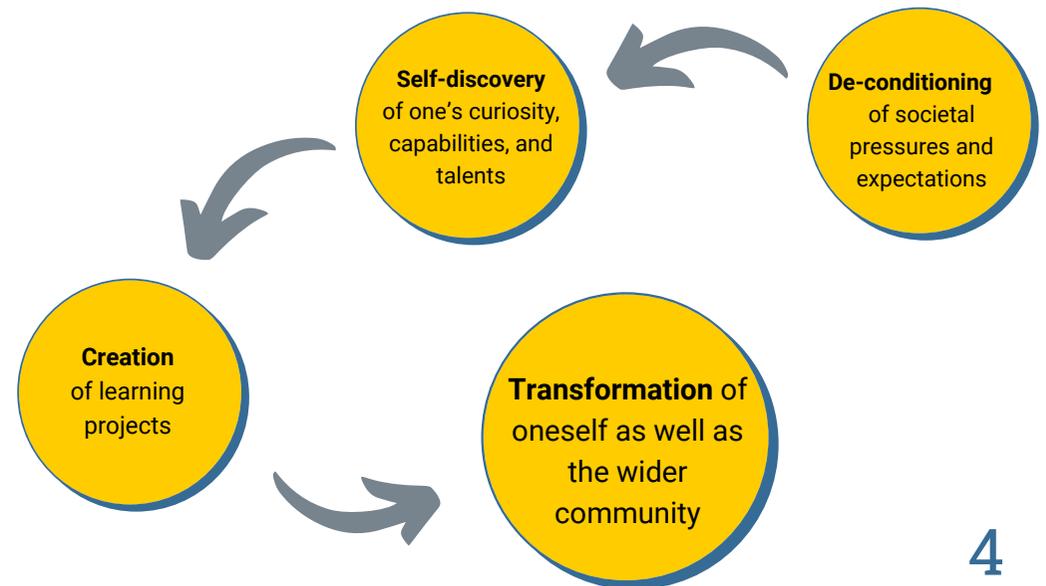We believe that education must be brought back into the hands of the people

Therefore we envision a **self-designed education for all**, which is accessible, equitable and localised.

Our Mission

Reclaiming the meaning of education and breaking the existing factory-model of learning, by helping **communities create their own schools without teachers,** called Nooks.

Our Approach

Self-discovery of one's curiosity, capabilities, and talents

De-conditioning of societal pressures and expectations

Creation of learning projects

Transformation of oneself as well as the wider community

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OUR PROGRAMS

What is a NOOK ?

A Nook is a **self-organized, physical space** created in rural, urban, tribal & refugee communities, where people get together and learn by building projects base on their own interests.

The Nook was **conceptualised in 2014** when the first space was set up in Banjarapalya, rural Bangalore, which later became the first pilot Nook.

NOOK
experiment • **express** • experience

BRINGING LEARNING BACK INTO THE HANDS OF PEOPLE

Today, **there are eight Nooks spread across India**. We also ran short-term programs in a public library in Shivaji Nagar and an agricultural village in Mangalore.

Uganda, **Africa**

Fort Kochi, **Kerala**

Proto Village, **Andhra Pradesh**

Dilshad Garden, **Delhi**

Whitefield, Kaggalipura, J P Nagar, Shivaji Nagar, Mangalore, **Karnataka**

Khera Jattan, **Punjab**

The NOOK Model

1st Year

A facilitated **phase of skill-building, exploration and self-reflection** which helps new Nook Learners to free themselves from societal pressure and expectations

2nd & 3rd Years

A phase in which **Learners start pursuing their own, advanced learning goals in a systematic manner**. Learners come up with new ideas and innovate to improve and transform community life.

4th & 5th Years

A phase that marks a new beginning for Learners. **They are able to take their skills and learning out of the Nook into the community** to initiate and create independent livelihoods.

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Impact and Learner Projects

The Learner Projects cover a whole range of skills and knowledge fields.

N⬤⬤K

Proof of **L**earning

A proof for the context-based nature of the learning that happens across our self-designed learning spaces is **the sheer variety of projects you can see when stepping into any Nook.**

Deepika, a mother who wants to earn additional income by **making jewellery**

A recent college graduate whose dream it is to build a drone, **acquires basic programming skills** to make his dream reality

Fatima a **65-year old lady who makes an electronic circuit** as part of building a mini-robot together with some school children

A group of young men & women **creating eco-friendly, low-cost sanitary pads** after identifying this as an urgent need in their community

Directly and indirectly impacted Learners across all Nooks
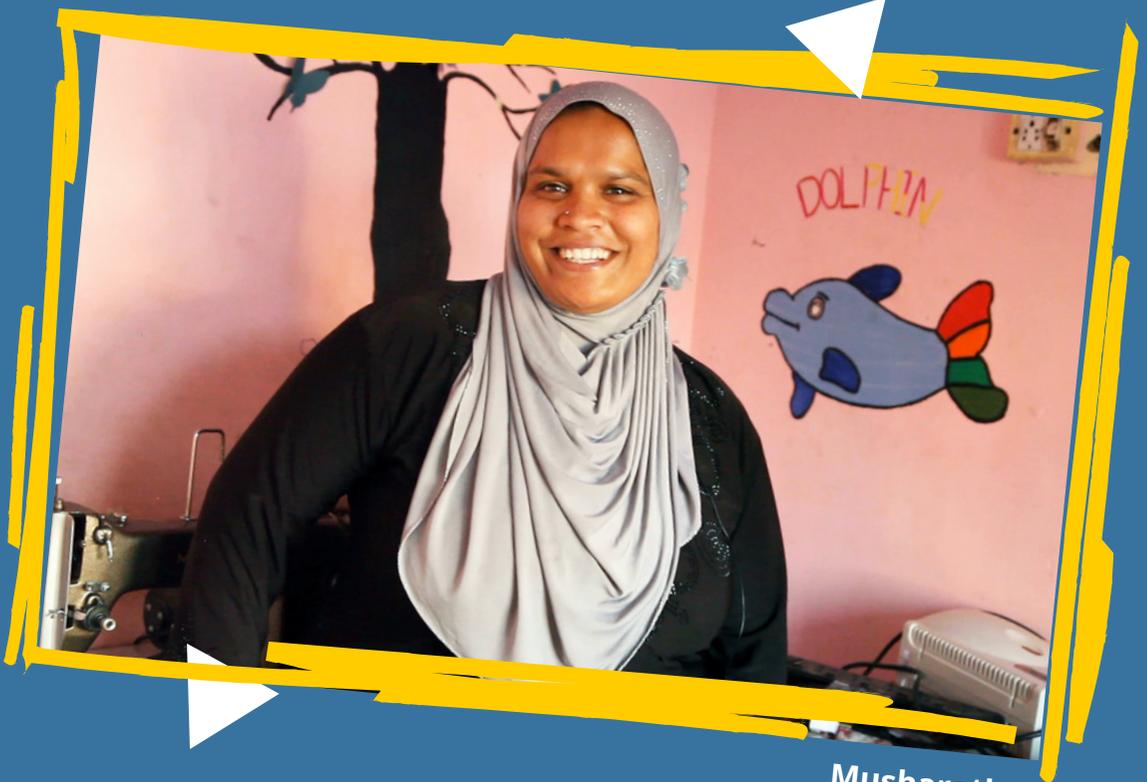
In **2019**
7598
Learners

→

In **2020**
8754
Learners

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LEARNER STORY

I heard from my neighbours that this place is offering free learning opportunities, so I came here to learn tailoring.

I also have a baby son to take care of, and the tailoring skills I acquired at the Nook help me to earn money from home and become more independent. "

**Musharath,
Kaggalipura Nook learner**

Musharath, a 33-year-old mother, lives in Kaggalipura, a small village on the outskirts of Bangalore. Musharath could not complete her schooling and got married early after her beloved father's demise. After coming to the nook, she has learnt tailoring, started her own business and feels more independent now.

LEARNER STORY

> There is no other place which allows me to access laptops and the internet for free.
>
> Here for the first time in my life, I can do anything, and through this, I can acquire new skills according to my interests.

**Muskan,
Kaggalipura Nook**

19-year-old Muskan joined the Kaggalipura Nook in 2018. She comes to the Nook on a regular basis to access computers and the internet and learn new, relevant skills.

Muskan joined the nook after dropping out from school in 11th grade. Currently, she is engaged in making bottle art - reusing empty bottles for creative product design - and tailoring.

Regional Self-Learning Spaces

What is a NOOK HUB?

A Nook Hub is a combination of a Nook and a growth office. These nodal points enable us

- to create teams in other geographies
- to allow the concept to be locally customised and spread.

The concept of a **Nook Hub came to life in 2019** with our first partner in Rwanda, the Dream Village Organisation.

The IDEA of a NOOK HUB

The idea was to share our philosophy and concept of self-learning with international partners who can grow it locally with our support.

350 Learners have been directly and indirectly **impacted by self-learning** across Nook Hubs in 2019-2020

329 **Projects** have been initiated and carried out by learners

Our **first Nook Hub was created in Rwanda in a village called Gahanga.** We are now looking at creating our second Nook Hub in Masvingo, Zimbabwe.

All international projects are always voluntary with no income to DEFY India as we are pushing to spread knowledge on the Nook concept all over the world.

LEARNER STORY

> Self-learning means we decide ourselves what we do - it's the greatest freedom there is

Samuel Manishimwe from Gatovu village, Rwanda, has a passion for music and dance. His dream is to become a successful musician and follow in the footsteps of his idols P-Square and Davido, two popular R&B artists from Nigeria.

Coming to the Nook Hub has given him the opportunity to learn more about music and compose his own songs.

**Samuel M,
Rwanda Nook Hub**

Families Learning Together Program

What is FLITE ?

The FLITE program is a **telephonic initiative that turns homes into learning spaces** for the whole family: **a low-tech solution for life-long learning** among marginalised communities.

Launched during the pandemic, we want to enable the families we work with to **(re-)discover the abundance of skills, knowledge and talents that everyone has** and turn these into concrete learning projects

FLITE Aims

to transform the boring state of **'families stuck together' into a once-in-a-lifetime opportunity of 'families learning together'** that can create stronger family and community learning.

IN PILOT PHASE

Our long-term vision is to **create 'Learning Societies' with FLITE** that help reduce the distance among family members and among families, while developing a wonderful co-learning process.

The Design

Phase 1

The initial, exploratory phase of the **12-week telephonic program** will continue for a few weeks

Phase 2

Where families lead conversations and pursue their own, potentially **advanced learning projects** addressing concrete needs, interests, acquiring new skills and knowledge as well as the crucial know-how of **'learning how to learn.'**

Phase 3

Families eventually take up the role of **facilitating FLITE with other families in their own communities.** Slowly, we want to reach a complete community connection.

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LEARNER STORY

You are giving us an opportunity to learn together. Last week we did something separately and this week we will do something together, so we can learn a lot

"

Balaji's Family

Balaji, a 16-year old boy has been a Nook learner since the past year. Due to the Pandemic lockdown, the family is with no job and school. Now, with the FLITE Team's support, the family memebers are making learning happen in these unprecedented times. Family memebers are interested in learning about typing and basics of computer, photo editing, animations and collectively, cooking and digital rangoli designing.

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CISCO thingQbator: University Makerspaces

What is a **t**hingQbator ?

CISCO thingQbator is a **network of makerspaces in partner Universities** where students can,

- learn about digital technologies in a hands-on environment,
- turn their ideas into working prototypes
- and in the process come up with local solutions to local problems.

Since 2018, we have been working with our partners CISCO, Nasscom, Li2 to create University Makerspaces called CISCO thingQbators

Aim

The aim was **to create makerspaces where IoT enthusiasts could learn more about digital technologies and turn their ideas into working prototypes** and hopefully the next billion-dollar business innovation.
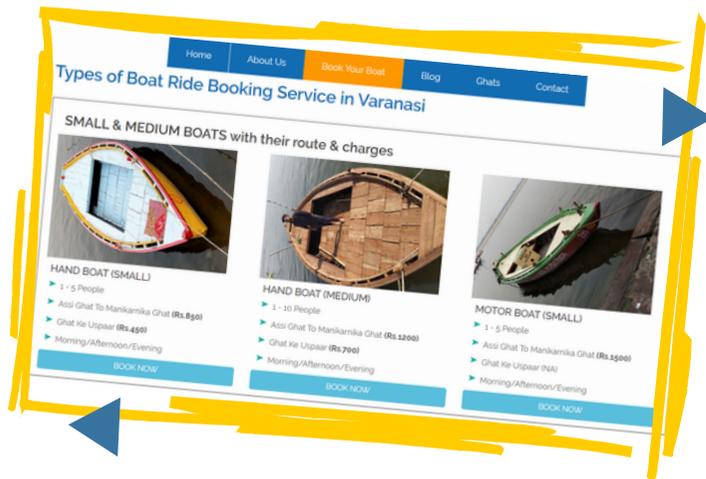
We are now in **six Universities in India**:

- IGDTUW Delhi
- IIT-BHU Varanasi
- Trident Bhubaneshwar
- Amrita University Coimbatore
- IIITMK Trivandrum
- MNNIT-Allahabad Prayagraj

In **2020**

There are currently **11 startups** working in different fields and **1600+ learners have benefitted** from the initiative in the two years since its inception.

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CISCO thingQbator Startups

Varanasi Boat Booking

It's a portal to make online bookings of boats in Varanasi for Ganga tour.

Nirol

Khsitij has developed a prototype for measuring the adulteration level in fuel.

Accupace

The team is developing IoT healthcare devices. One such device is Smart Insole that generates and stores electrical energy from your footsteps.

Stodict

Stodict provides early alerts about events or news which has the potential to become breaking news using AI; Empowering journalists to create High quality and engaging content. Team has found customers to pilot their service in newsrooms.

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LEARNER STORY

When I came to the thingQbator, it was just an idea that me and my team had worked on.

Now we have built a prototype for precision farming which we further develop in cooperation with the Government of Kerala's Young Innovators Programme.

"

Hashim Abdulla T,
IIITMK Trivandrum

Precision farming refers to everything that makes farming more accurate and controlled. A key component of this approach is the use of information technology.

To Hashim, the thingQbator is a place that offered him the freedom to practice trial and error learning without pressure and fear.

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University Makerspaces Program

In the process of **providing education for all** and with **the focus for skilling people to earn their livelihood**

The centralized solutions implemented by the education system in India adopts **methods of delivering education with a one-size-fits all approach** which has been **detrimental** for the quality of higher education.

In the Making

The **P**rocess

- The team is **researching the various problems in the Indian higher education system**.
- The listed problems will be supported with **real-life stories shared by students and university representatives**
- The next steps to narrow down on our solution will include a **detailed analysis through the design thinking process** and eventually our solution for the university maker's spaces.

Purpose of **E**ducation

Considering that the purpose of education is **to prepare students for the challenges of life and career**, the universities fall short of educating students to think critically and build the necessary skills as per the opportunities in their chosen paths.

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DisPeCS: Disaster Prepared Community Spaces

What is DisPeCS ?

It is a **collaboration of people with various backgrounds and experiences to create a deployable disaster preparation package** for every community.

The Idea behind DisPeCS

Local community members always are the first ones to respond to any disaster **without adequate resources and training**

The package will prove to be of immense help for the spaces and various community members existing throughout the world to **efficiently tackle catastrophic emergencies and disasters.**

In the Making

The Progress

- The concept note has already been drafted.
- Team members have done **credible research on various aspects of disaster management**.
- The **designing process** has recently commenced.

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ADDRESSING THE SDGs

4 QUALITY EDUCATION

SDG 4- Quality Education
We ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

10 REDUCED INEQUALITIES

SDG 10- Reduced Inequalities
Creating opportunities for people in marginalised communities to learn new skills to help ellievate their financial status

11 SUSTAINABLE CITIES AND COMMUNITIES

SDG 17- partnerships for goals
Partnering with organisations working in marginalised communities in Africa.

5 GENDER EQUALITY

SDG 5- gender equality
On average 50% women participation rate in Nooks

17 PARTNERSHIPS FOR THE GOALS

SDG 11 Sustainable Cities and Communities

80% of trash materials is used to create projects in Nooks and Nook Hubs.

FINANCIAL STATEMENT

Financial Year	2016-2017	2017-2018	2018-19
	Amounts in INR	Amounts in INR	Amounts in INR
Expenditure			
Fort Kochi, Kochi Nook	-	₹63,768	₹329,277
Kaggalipura, Bangalore Rural Nook	₹47,297	₹375,700	₹341,008
Whitefield, Bangalore Nook	-	-	₹588,851
**JP Nagar, Bangalore Nook	-	-	-
*Protovillage Nook, Andhra Pradesh	-	-	-
DEFY Corporate Expenses	₹108,035	₹406,749	₹525,339
*Shivajinagar, Bangalore- Library	-	-	-
*Dilshad Garden, Delhi Nook in School	-	-	-
Cisco-Nasscom ThingQbators (6 University Makerspaces -- Coimbatore, Delhi, Bhubaneshwar, Trivandrum, Prayagraj, Varanasi)	-	-	₹4,184,184
*Kherra Jattan, Punjab	-	-	-
Total of Expenditure- A	₹155,332	₹846,217	₹5,968,659
Receipts/Surplus			
Surplus-Beginning- B	₹0	-₹70,332	₹732,099
Donations & Grants- C	₹85,000	₹1,648,648	₹9,671,198
Surplus-at the year End (B+C-A)	- ₹70,332	₹732,099	₹4,434,638

* marked projects have been voluntarily from DEFY without income or expenditure. All international projects are always voluntary with no income to DEFY India.

** marked projects have started in 2019-20.

Note: For many Nooks, the funding partner is able to make expenses directly on ground or via a local partner

International Plans

The Power of Sharing

At DEFY, we strive to share our learnings and philosophy. This has led us to spread our idea and share the Nook self-learning concept globally.

Work in progress

We are excited to be creating new self-designed learning spaces in **Zimbabwe**

In collaboration with two organisations working with local communities **to create more opportunities & build skills for growth & financial independence**.

- A **Nook Hub in Masvingo** with our partners Friends For Matibi
- A **Nook in Bulawayo**, Zimbabwe with our partners SwiZimAid.

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FOUNDING TEAM

Abhijit Sinha

Founder /CEO

Megha Bhagat

CGO

**Arvind Badrinayaranan**

Director

> Educational systems are failing our societies, creating individuals unable to think, critique or create for themselves.
>
> Project DEFY is a **call for humanity to collectively create a system of education accessible to all w**hile redefining how to learn and collaborate not just in childhood but throughout our lives.- **Arvind Badrinayaranan**

Team & Volunteers
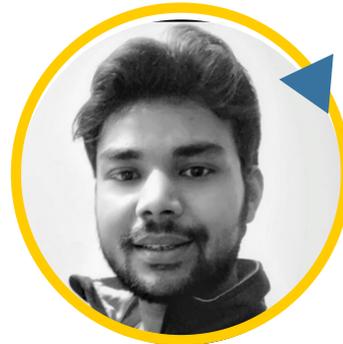
Our Advisory

Rtd General Pant

Governance and Policies

Sanjay Prasad

Strategy Advisor

Vidya Lakshman

Technology Advisor

Bilal Ghalib

Learning Advisor

"

In the two years that I have advised and mentored Project DEFY I have seen the organization rapidly grow from a **project centric organization to a programme centric organization with a deep emphasis and investments on people and processes**. It has been heartening to see the firm transform rapidly keeping in tune with the times and needs of its core demography as it seeks to truly disrupt the education industry and its mindsets. In the year ahead I would like to see **DEFY emerge as a think tank and a leader in the space of diversified education** with a global foot print guiding others to adopt and spread the need of a new way or learning

- **Sanjay Prasad**

"

OUR PARTNERS

- SINA - Social Innovation Academy
- BitGiving
- Melton Foundation
- CISCO
- NASSCOM Foundation
- Global Humanitarian Lab
- Roundglass
- Dream Village Organisation
- ZimSwiAid

- Headstreams
- Labdoo.org
- International Development Innovation Network
- Protovillage
- TESCO
- Kanthari
- Makeshift
- Friends For Matibi

THANKYOU!

DEFY would not be where we are now without the support and encouragement from our partners from all over the globe.

RECOGNITIONS & AWARDS

RECOGNITIONS & AWARDS

In June 2019 Project DEFY received the **Transcendence Award for their innovative work in education** by the Michigan State University's Global Youth Advancement Summit.

DEFY Won the **100 Top Innovations Prema Gyan Award at Lausanne**, Switzerland at the Good Festival.

Abhijit was selected as a leader to participate and speak at the 48th St. Gallen Symposium held in May 2018 to debate «Beyond the end of work» in St. Gallen, Switzerland.

Selected 3 years in a row 2017-2019 for one of the **first 10 of 100 global educational innovations by Finland** based HundrED(.org)

RECOGNITIONS & AWARDS

Global Junior Challenge
Projects to share the future

Winner of Global Junior Challenge 2015 held in Rome that rewards the **innovative use of technology for the education** of 21st century and the social inclusion.

FABLEARN

Presented the DEFY model at Stanford University at the FabLearn conference which is now part of the ACM digital Library.

International Visitor Leadership Program
U.S. Department of State

In March 2018, **Megha Bhagat was Recognized as a future leader of change** by the US State Department International Visitor Leadership Program (IVLP)

Womennovator
DEFININGSUCCESS

In 2018, **Megha was selected among 100 "Women of Substance"** by The 'Wommenovator' program.

SUPPORT US!

Due to Covid-19, our communities are struggling to have their basic needs fulfilled. We are working hard to make sure they can get back on their feet and continue to learn together.

Please consider donating to help families in need.

DEFY EDUCATIONAL ORGANISATION
Acc Number –50200023047507
Bank Name – HDFC,
Branch - OLD AIRPORT ROAD
IFSC Code –HDFC0000075

If you want to create or build a Nook contact us: info@projectdefy.org
*Project DEFY is a 80G tax exempt organisation. However, we can only accept donations from Indian nationals at this time.

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Connect with us!

Learn more:
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End of year Report 2020-21

CEO's Note:

2020 has been an intriguing year to say the least. While we had to pause many of our nooks and operational programs, we also had to respond to the challenges faced by families in various communities we work in. We took this as an opportunity to listen to the people again and ask them how best we can support the needs of their present and the near, uncertain future. The result? many new programs, a year full of design and trials and experiments. Reaching the end of this topsy-turvy year, DEFY has grown and developed holistically, able to bring the passion of the team to the most difficult challenges in the world, through reimagining learning in many different ways.

Annual Report

December [2020]

1

Nooks in India

Nooks in India closed this year due to the pandemic. Remote learning program implemented to work with communities

2

International nooks

Rwanda nook were shut during pandemic but have been initated since October.More nooks to be implemented in pipeline

3

Other Programs
New programs created and designed this year both in offline and online spaces. Multiple small projects adopted to provide quick support to communities

1 | International Nooks

The International Nooks are a part of the growth structure of Project DEFY and the Nook Concept. The expansion of the Nook concept was first realised in 2016 when the first Nook was set up in Uganda which led to the spread of the concept to different countries such as Rwanda, Zimbabwe and now soon to be in Bangladesh.

The Nook Hub concept - A Nook Hub is the growth point for the Nook concept in countries and will have an office to help with spreading the concept in the country and region.

Rwanda Nook Hub video link - https://youtu.be/1_-l6oZmDHI

Due to Corona we had to close the place but however we were granted permission to open the space following the guidelines to protect the learners and the community of Gahanga. The team and volunteers worked hard to make sure the place was safe and that all the information was shared with learners.

The Nook Hub opened for the second goal cycle on 26 November 2020 and the learners are coming to the space on allocated timings and are following all the safety guidelines.

In this picture learners are putting down their goals for the cycle

1 | Stories

Samuel 19 years: Aspiring Musician and Comedian

-A pandemic may not have seemed like an ideal time to pursue one's passion, especially in marginalized communities where income is a challenge. However, it has even surprised the facilitators how passionate the learners are about their projects. For example, Samuel, who occasionally has to miss the FLITE calls to work a part-time job, is determined to be a successful comedian. When he told us of his family's economic challenges, we suggested he perhaps explore a project that could generate some income for his family. He stuck to his original decision, saying that he will find a way to monetize his passion; otherwise, he replied, he would get stuck in just finding a job and never live his dream.

Ananias and family

Of course, different communities have different needs, and in Gahanga, the main motivating factor in many people's lives is earning. Ananias and his family were very insistent from the beginning of the FLITE program on pursuing income-generating activities, and after a few weeks of exploration, they decided to create a canteen together. They split up their roles by determining who would do accounting and budgeting, who would cook, etc. and set off to learn from existing local canteens. They even settled on a location that has a lot of footfall, and after many lengthy discussions on how to start a canteen, they made a detailed budget with one-time and recurring expenses. Now, they plan to begin making at least 50 samosas in the coming week and trying to sell them with their existing resources, so that they can start to earn slowly and build up to the larger canteen.

2 | NOOKS in India

The Nooks, our self-designed learning spaces, alongside all other educational and public spaces had to be closed down this year since the end of Feb 2020 and for a yet to be known period of time. During this period, the team at Project DEFY stepped up to support the community around the Nooks with food grains, funds to pay their house rent or utilities, medicines etc. The members of these communities were struggling to make the ends meet with no income for a long period through the pandemic months.

Eventually, when the lockdown ended and the economy started opening up, we envisioned a new Program where the learning can continue from home for the community through a remote learning program to support the families for any learning or skill they wished to learn. The new normal had brought new challenges along with it and the community was expected to quickly step up with their skills and understanding. This program was piloted from Aug 2019 onwards with a small set of learners from 4 communities. It has now matured and is being implemented as a program to be introduced to more people in the community.

Once Nooks can safely re-open, learners will have already begun their projects, and will arrive with an understanding of their passion. The new routine for the Nook being planned for the next year will be a 90-10 model for the nook access. The learners will work on their projects 90% at home, and 10% at the Nook. They will come to the Nook on alternate days, so that there are never more than a few people at once. The nook will be made a safe place to work with the rules to ensure all of them coming into the nook are safe.

Proposed projects for next year:

2 new nooks are under discussion with prospective partners. The pandemic situation and the government guidelines to re-open community spaces may create a glitch. However, the team is working on research and documentation related tasks for the projects.

Some fund raising projects are also in pipeline for 2 of the existing nooks. The operations at these nooks are kept at minimum and will be stepped up on the onset of funds.

3 | FLITE

Families Learning Together - 'FLITE' - is a program born out of the need to ensure continuous learning for the marginalised communities Project DEFY works with. It is a low-tech low-cost phone learning programme that reimagines families as a basic unit of learning. Spread over 15-25 weeks, each family that is part of the programme engages with a facilitator over a weekly hour-long phone call.

The project has been implemented in two phases.
Phase 1, the Pilot began with 8 low-income families in May 2020 who belonged to locations of JP Nagar (Bangalore), Kaggalipura (Bangalore), Whitefield (Bangalore) and Gahanga (Rwanda).

From these families, 3 are scheduled to complete the programme by mid-December 2020. One family has rejoined as part of Phase 2 of the Programme. The rest have dropped out due to various unavoidable reasons including poor health and supervening school, job and family obligations.
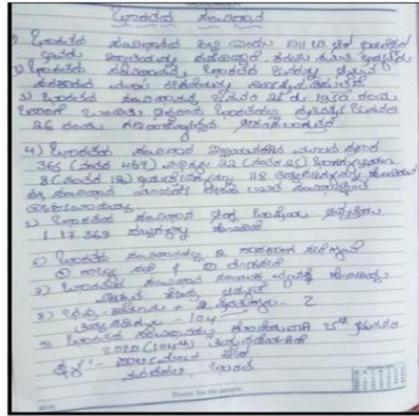
Phase 2 of the programme started in September 2020 with 16 low-income families joining the programme overall from Whitefield. Due to a number of human resource related issues, the start of the second phase has taken place in a staggard manner, with some families beginning in September, October, November and December respectively. At present there are 15 families participating in the programme, consisting of 34 people.

The programme is now split into three modules -
MODULE 1: Explore - family members together uncover their interests and passions, some of which might have been hidden or forgotten. This module lays the foundation for seeing families as units of learning, creating spaces for inclusive discussions among participants.

MODULE 2: Refine - family members understand their own 'ikigai' or reason for being, ie. a combination of what each of them like, are good at, and can support themselves from. New skills are developed according to their interests, and the family learns to give and receive constructive feedback.

MODULE 3: Grow - the family develops and completes a 2-month long project to achieve a collective goal based on each of their interests. They are each given the opportunity to become a FLITE facilitator and spread self-learning to other members of their community.

3 | Stories from FLITE

FLITE PROJECTS

Prajwal a 17 year old, from Whitefield, Bangalore was a regular at the Nook until the lockdown was imposed due to pandemic. He intended to continue his learning remotely and hence joined the Project DEFY FLITE programme. His thoughts were "I am interested in so many different things, but I don't like to work on it every day, all alone."

Through the calls, we learned about his interests in computers, technology, drawing and video games. He worked on projects to write HTML program to add numbers, created a website to display his own art work and developed a car-racing video game using 3D software. On deeper exploration, he realised his dream was to build beautiful homes for people. He then embarked on a 2-week long project to design an ideal home which he started by creating a 3D sketch on paper, and then used a 3D design software to create this model.

He's now experimenting his graphic design skills by creating a comic book autobiography. He feels that "talking to the FLITE facilitators is like speaking with a group of friends and believes that they help him to stay focused and are always encouraging him to do better.

Vanajakshi, 33 years old homemaker, had aspired to be an IAS Officer through her childhood due to her keen interest in government functions and her passion to help people in her community. Tragedy befell her family in her final year of college and she couldn't achieve her dreams. After marriage, Vanajakshi's husband was not very supportive of her ambitions.

During the pandemic lockdown, Vanajakshi re-discovered her passion and started working on some projects which involved a deeper understanding of the Indian Constitution. She also wants to find a way to earn an income from home to support her family during the difficult period. She is exploring options to start stitching clothes as a business and is learning to create new blouse designs.

4 | Makerspaces

The Makerspaces project, which was implemented in 6 Indian Universities and was functional for the past 3 years, came to a closure in June. The purpose of this project was to support budding entrepreneurs to innovate and create solutions for enhanced social Impact at a commercial scale, by providing them with the necessary tools, materials, resources and training. In these years of the project, the following broad activities were envisaged under the program.

1. Seamless running of the 5 makerspaces set up in different Indian Universities.
2. Setting up a new makerspace at MNNIT Allahabad in 2019-20.
3. Nurture the spirit of entrepreneurship by identifying and handholding teams/ individuals / students in creating prototypes/ testing proof of concept (PoC) to go to market
4. Enable young people to gain technical and design thinking skills and provide them guidance to be able to create the job they want for themselves.

Internsip

In the beginning of 2020, with the Covid lockdown, and the Universities being shut down, we noticed that university students were struggling to find support to give shape to their ideas and interests. Hence, the Project DEFY team put together a quick program to catalyze their efforts and support them to complete their projects. This program was supported by our partners too and was called the Cisco thingQbator internship program. The thingQbator Internship Program(TIP) was a virtual creative learning program where university students engaged in building tech solutions for problems they identified and researched. Students from Universities across India like the IIT-BHU Varanasi, MNNIT-Allahabad, Indira Gandhi Delhi Technical University for Women, New Delhi, Trident Academy of Technology Bhubaneswar, Amrita School of Engineering Coimbatore and IIITMK, Kerala and several others, who aspired to become problem solvers joined this virtual internship to turn their brilliant ideas into working prototypes.

This project successfully met its objectives by achieving the below milestones.
a) Complete the full execution of the program and the cohort by finishing all deliverables that were originally agreed upon by all partners and stakeholders.
b) A thingQbator makerspace was set up and made operational at MNNIT, Allahabad. Students (Cohort and non-Cohort) utilized this space to work on their ideas relating to IoT and beyond.
   c)   One Cohort was run at each of the makerspaces, consisting of at least 60 students. Students being part of the cohorts availed access to technical mentors, maker space tools and equipment, course content and design thinking material to support them as they build their prototypes.
   d) Numerous technical workshops and community events were organized for students' participation in IoT and beyond. Around 100 days of technical workshops were conducted by Li2 technologies, 50 community events encompassing a variety of topics, and several webinars and peer demo days were organized across all the thingQbators.

The program was divided into three tracks: The Learning track, The Project Track, and The Start-up Track.

The Learning track was for the students who were starting their journey in the creative problem solving. Here, the students did'nt necessarily need a concrete idea or a team to become a part of the learning track.

The Project track was for the people who already had a basic prototype of the creative solution that they came up with and needed help in the actual building process to make their solution start-up ready.

The Start-up track was for the most advanced projects, where the students had created a minimum viable product and were on their way to founding start-ups.

Impact Data

Indicators	# planned	# actual	Details or notes
# workshops / events	365	365	This includes community events, Hacks, Demo days, Internships and Li2 workshops.
# participants (M/F)	3630+	3630+	Participation for above events. Footfall data for few events like open houses and outreach stalls can't be recorded.
# speakers engaged	30	30	Speakers/facilitators for the community events.

5 DASH

Learning from the success of the Online Internship program that we executed at the Makerspaces project in the year 2020, our team at Project DEFY created a new program which we are extending to the student community worldwide. In this program, there will be two tracks; Track 1 which takes students from a passion to a paper prototype, and Track 2 which helps them to create a venture from the prototype.

The program is being designed by the very same design thinking method which will be implemented with the student community eventually when the program goes live in Feb 2021. At present, the program design is in the phase of finding potential partners, mentors, volunteers, and finalizing the workshops and activities. The current activity the team is working on in this project is to create the action plan for the track 1.

The team is now working on fine tuning the various features of the internship program and designing the flow of the program. Some of the tasks taken up under this are to review the previous tracks, assembling the team, defining the structure and flow along with the partnerships needed for it. The next steps would be to initiate the marketing activities by publicizing the applications and reaching out to mentors, volunteers for the program.

6 | New Programs-DISPECS

Various community spaces exist throughout the world, driving from cities to slums, villages to refugee camps, and even tribal settings. They are sometimes structured or unstructured; with an agenda or without. The purpose of this program is to enable such community spaces to be prepared for disasters in a way so that they themselves can become an organized first-response to various forms of disasters.

In this program, the team is creating a holistic package, complete with resources, training materials, volunteering structures and a communication network that can help the space become a hub for first responders, during Pandemics (Corona, Nipah, Ebola etc) (Phase I), Natural Disasters (Earthquakes, Floods, Famine etc) (Phase I) and Man-made disasters (Phase II) (Riots, Wars, Recessions). Various aspects of disaster management are also being considered like Volunteer Setup, Communication Mechanism, Food & Nutrition, and Supporting Animal life & Ecology and planning partnerships with other organizations or individual collaborators who can help with execution of the program.

Research:
The primary research to understand the existing problem is being conducted by interviewing with experts and NGOs working with affected communities especially in disaster management and speaking to affected people in different communities. Whereas Secondary Research is conducted by online Research and study of the global practices for volunteering during and post disasters. The team has now started working on the training program and is looking to design the program such that the community volunteers understand their roles and responsibilities before, during and after a disaster.

The program will be implemented in 4 phases:
•Entry into Community
•Deploying Trainings
•Segment Trainings
•Retraining

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Food & Nutrition: The problem statement that the team has come up with is:
The communities face shortages of food during and after disasters due to the unavailability of the alternative food supply chain and prolonged disasters like recurring drought.
The team conducted a Good/Bad/Crazy ideation and did the grouping of the ideas according to the short term and long term strategy.
Finally the idea statement that the team came up with is:
Develop alternative food supply supply chains which are owned by the community. The community will grow food collectively even if it is small scale, and do preservation practices to deploy during disasters.
With this statement in mind, the team designed a program to be implemented in 5 phases:
Phase - 1: Understanding the Community's Challenges and Aspiration (Preparation Phase) - 1 Month
Phase - 2: Training Program, Logistics and Work Plan for the Teams - 1 Month
Phase - 3: Executing the Work Plan: Cultivation of Vegetables and Preservation of Foods - 4 Months
Phase - 4: Marketing of the Preserved Foods to generate Income as a part of the Program - 2 Month
Phase - 5: Iteration of the Program - 1 Month

The solution will have a community-led communication channel through phone devices which will be setup during peacetime. They will be trained for the usage and will start using radio devices through sustained channels (like local shops and community centres). This will form the basis for effective deployment when disaster strikes and hence will be in effect during and post the disaster.
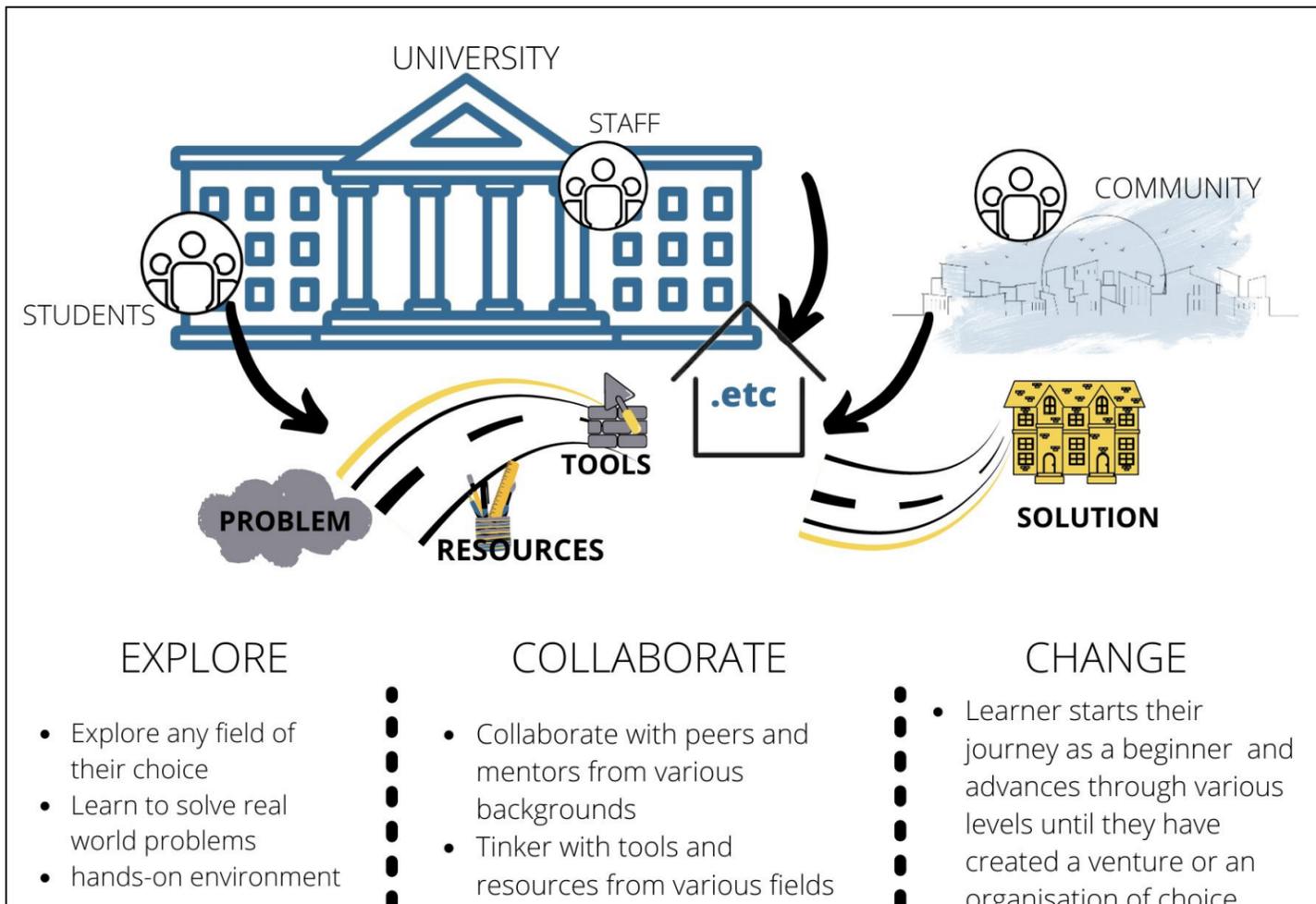
In the next couple of months the plan is to complete the program design, finalize the training module and initiate testing the modules in a few communities.

Animal Welfare & Ecology:
During the research and interviews with the disaster survivors, the team learnt that the people were not able to devote their care and attention to flora and fauna because they don't have the resources to protect them - most of the available resources were used to rescue humans. At a time when people were underprepared to save themselves too in the face of a disaster. On further research and discussions with experts, the team was able to arrive at a probable solution. First the team intends to create a dynamic database of animals and plants of the village on a map. This will be made by the community with initial help from outside. The map/sheet shall act like a guiding tool during a disaster for rescue – providing the details of which animal is where and when do they have to be evacuated based on real time metric of rain/soil quality etc. It will also have the real time information about plants that need to have the seeds preserved or others that need to be migrated.

In the coming month, the team will be working on training modules for the chosen volunteers with the help of experts in various fields.

UNIVERSITY
STAFF
COMMUNITY
STUDENTS
.etc
TOOLS
PROBLEM
RESOURCES
SOLUTION

EXPLORE
- Explore any field of their choice
- Learn to solve real world problems
- hands-on environment

COLLABORATE
- Collaborate with peers and mentors from various backgrounds
- Tinker with tools and resources from various fields

CHANGE
- Learner starts their journey as a beginner and advances through various levels until they have created a venture or an organisation of choice

7 | New Programs - .etc

The industrial revolution of the 1700s in Europe massively changed the meaning and structure of University. Previously, Universities existed, under the patronage of the monarch, as a workshop or laboratory for passionate experts in varied fields. With the Industrial revolution, University education changed to a mass-training methodology, where on the positive side it could accept a much larger number of students, even with lesser privileges or from lower social strata. On the negative however, university education turned into a mundane training program for the industry, turning it purely into a channel towards recruitment.

Indian higher education (and to a large extent even global higher education) faces now an identity crisis, pulled between a need for change and the habit of old. Universities now struggle to keep the confidence, curiosity, passion and humanity of the students alive and their skills relevant, driving them to become consumers and not creators. Hence, we believe that an Educational Reformation must begin somewhere within the University structure, such that we can create a real-world learning experience for students. This entails learning, and practically using this learning, in the context of their environment and community, while solving local problems that they are most passionate about. Such a learning experience will enable students to not only develop practical skills, but also enable them to positively build upon their empathy, confidence, curiosity and creativity - all attributes that are today considered most important in the modern human.

We, at Project DEFY, propose **.etc** - a unique learning space and experience, developed within the University, where students pursuing any degree collaborate with University staff and the community outside, to understand complex problems that face their reality and to attempt to solve them.

.etc is unique in its way since it is run and managed by its participants, i.e the students. This ensures that they learn about the responsibilities of the space while still in University and also grow the space to the limits of their own imagination.

This program has been designed and created for University students in India or around the world. The details of the program are mentioned below.

8 | Training Program

Project DEFY has used the break that the Corona pandemic forced upon us as an opportunity to design an extensive in-house training program which enhances the capacity of existing and newly appointed Nook Fellows (NFs). The main objectives of the program was to enhance the skills of all Nook Fellows for becoming effective facilitators that can give the best support possible to our Nook Learners and help them to excel. The program also focussed on introducing the newly developed Fellowship model for all Nooks.

The training program covered an extensive array of topics like understanding the core ideas of self-designed learning, how to be an inclusive facilitator, facilitating various community-building activities, how to support self-designed learning in the Nook through different sources and approaches for learning, administrative tasks at nooks, data collection and getting familiar with tools, materials, software, etc. used at the Nook. The training was delivered through a very engaging program where the facilitators utilised a multitude of facilitation techniques including workshops, case study discussions, brainstorming and ideation sessions, peer-to-peer and collaborative learning, self-made videos, presentations, etc.

The 3-months training, which ended in December 2020, had eight Nook Fellows successfully completing the program. While a detailed evaluation will follow, preliminary findings show that both the capacity of the NFs as 'Nook facilitators', as well as their self-confidence have drastically increased through the programme.
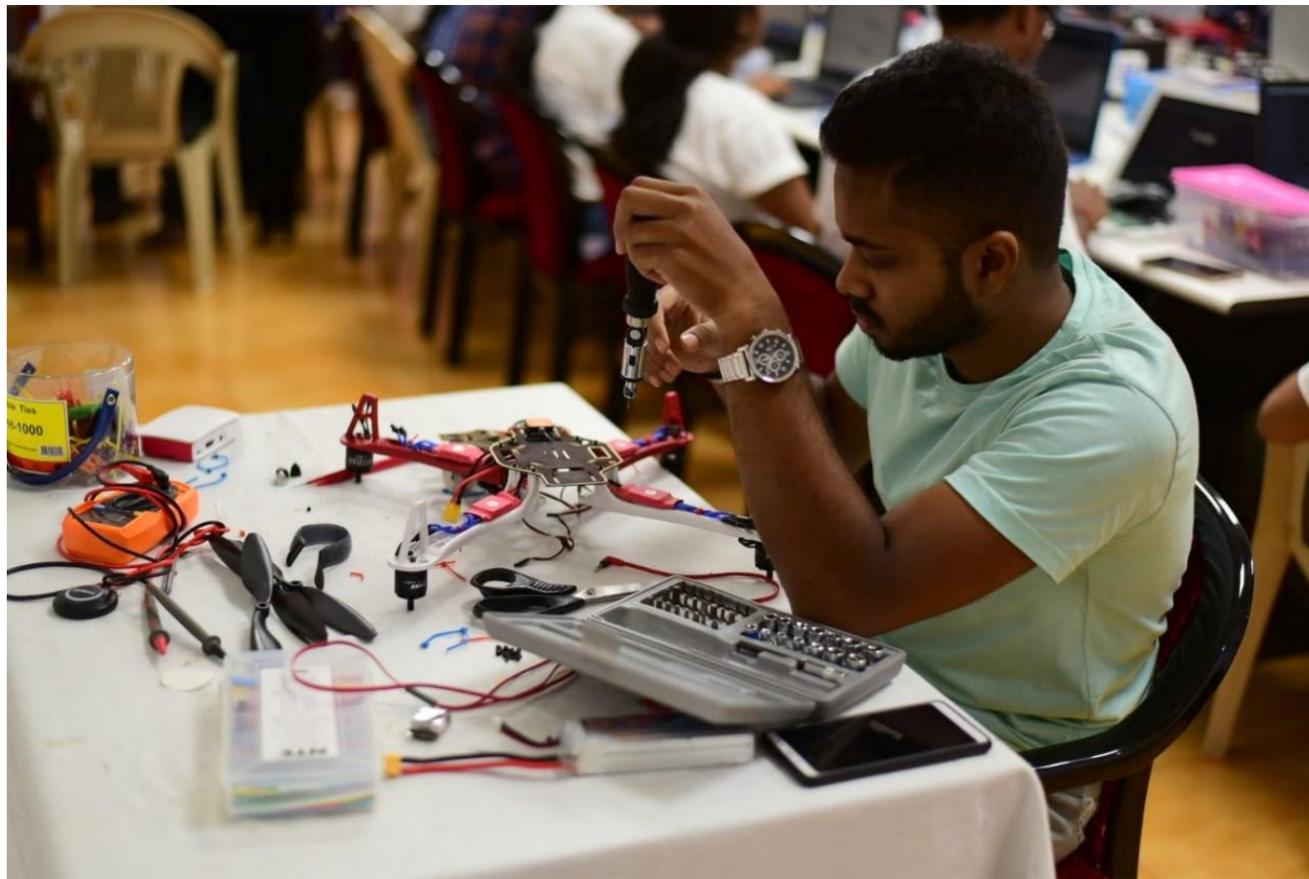
Feedback from the Nook Fellows and new learnings were continuously incorporated in the programme, the format evolved from a once-a-week interactive call to a self-designed learning programme with daily tasks and meetings and culminated in a twice-a-week workshop format with a focus on interactive learning, engaging sessions and learning-by-doing. An outside exposure program was also provided where the participants got an opportunity to interact with a larger audience of educators and members of the alternative learning community through the 5-Day 'Alivelihoods' online summit organised by Indian Multiversities Alliance.

Overall, the training program covered the Core Concepts and Key Areas of the NFs' roles. Some of the topics touched upon are mentioned below:

1. Philosophy, Values, and Ideas Behind Nook
2. What is Self-Designed Learning?
3. Inclusiveness and Culture of the Nook
4. Different Sources of Learning
5. Learning Cycle in the Nook (Induction Program and Goal Setting)
6. Tools and Safety Protocols in the Nook
7. Communication, Social Media and Learner's Stories
8. Administrative Tasks (Data Collection, Making Budgets, Inventory List etc.)

The training program also involved presenting the concepts that were being learnt by the NMs/NFs, where they shared their experiences, learning and feedback with the training team on a regular basis. On the final day of the program (December 15, 2020), the participants presented their personal journey and learnings over the last three months. Apart from the inspiring presentations, it was wonderful to see how the NFs grew into a community who cared for each other and supported one other, which also was one of the important goals of the programme, beyond the learning itself.

The team is confident that this training program will help the NFs to run their Nook with the learners in the best way possible, with additional training and support provided on regular basis in the future.

What .etc offers

1 EXPLORATION

The .etc program is designed such that a learner can discover and follow her interest and passion. The .etc provides the opportunity for learners to explore any field of their choice, pick up a real-world problem and design creative solutions while learning in a hands-on environment. Effectively the learners choose how they want to learn, and empower themselves to become self-learners.
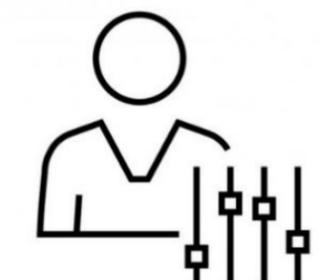
2 RESOURCE MOBILIZATION

The .etc space is equipped with material, tools and other resources, in fields ranging from arts & music to electronics & sculpting for learners to tinker with them, and choose what they want to learn. The learners are always supported by the community of other learners and various resource persons throughout their problem-solving journey.
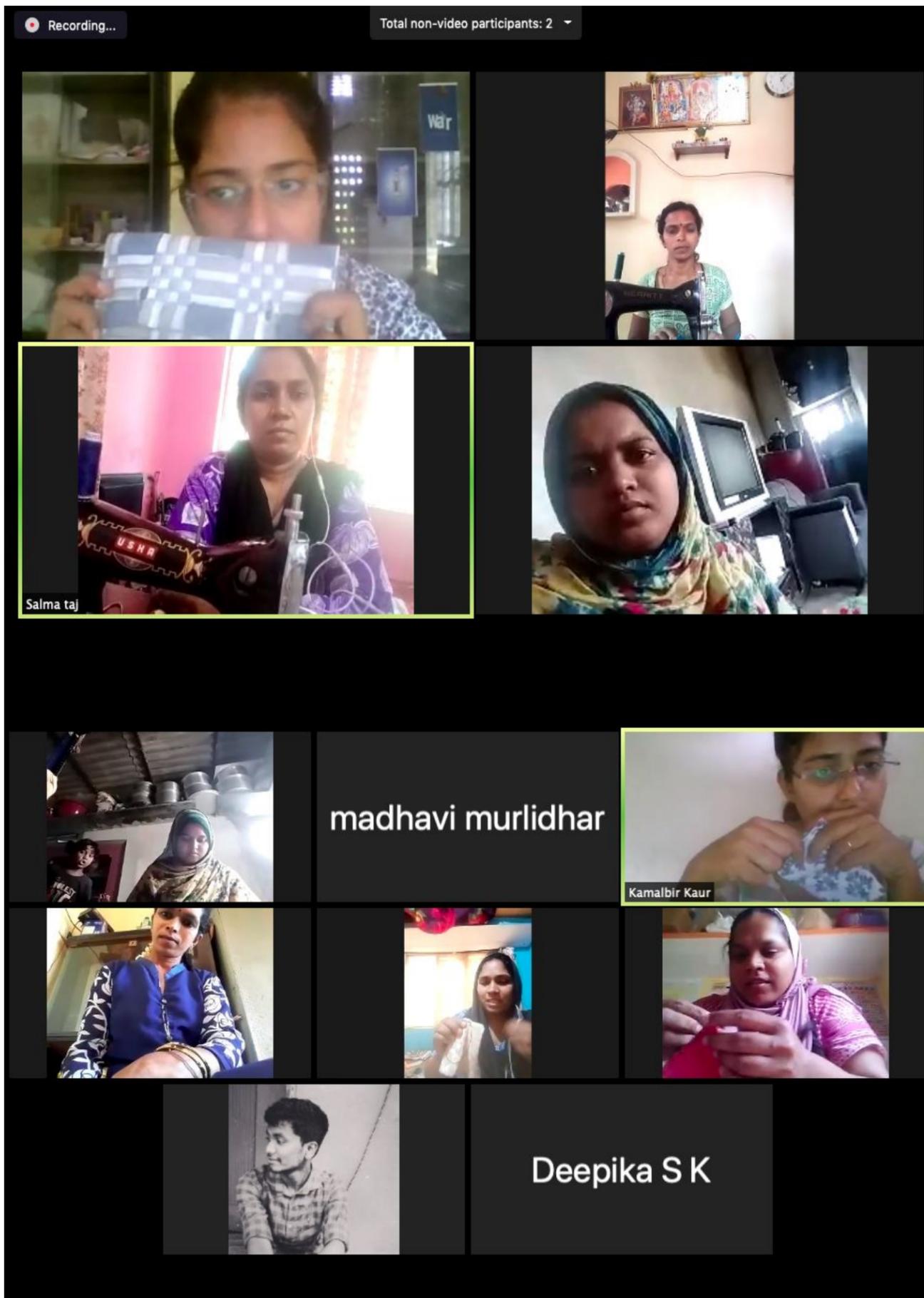
3 PERSONALIZATION

The .etc program is personalized to address the needs of the learners depending on where they are in their problem-solving journey. The program has three levels i.e. Beginner, Builder & Business. Every learner starts her journey from Beginner Level and chooses to graduates to advance levels to ultimately start a venture.

The .etc space - consists of several tools and materials and resources that its participants will need to work on problems of their choosing, as well as the creative physical space needed to develop their solutions. We believe that problems can be solved by a variety of methods, ranging from social movements to technology products to artistic expressions to music. Participants will be able to develop their ideas choosing any method, and sometimes cross-pollinating between them to create interesting combinations, not limited to just a fixed set of tools, but being able to procure more based on need.

The .etc program, that runs throughout the year, on the other hand enables the participants to explore their interests and local/global problems and work on them deeply. It is made up of three simultaneously running levels - Beginner's, Builder's and Business, that participants can traverse through based on how where they are in their thought process.

Other Micro Experiments

The employees at ProjectDEFY stepped up to offer any help and services needed to the members of the communities we work with during this unprecedented year of pandemic emergency. During this period, we were involved in addressing immediate needs that were emerging in the communities which included raising funds for emergency relief for families affected by the Virus, maintaining nooks in dormant state by shutting down operations but paying salaries to the personnel involved in maintaining nooks and raising funds for local organisations that offered food and basic provisions to families that were unable to take care of themselves.
Further, in response to the social isolation and anxiety that became significant issues as the pandemic blossomed, our employees innovated new programs to help the community with their problems as and when we discovered them like the Mental health support program, Awareness on domestic violence, quick skilling project etc.

Skill Development Program

Due to the Corona-Pandemic and the measures taken by the Government (lockdown, curfew etc.) marginalised people such as the ones in the communities we work with were severely affected. They all faced problems with loss of income and livelihoods and therefore needed some immediate assistance to support families. In response to this need, we created a skilling program with a focus to upgrade the basic skills that the individuals had and could enhance it to become entrepreneurs or be employable.
The program was piloted with 4 ladies from a community in Kaggalipura nook in Bangalore for a period of 1 month. They were provided with workshops, mentoring and materials as per their needs. Their goal was to earn an income by stitching products which they perfected during the program. They also innovated new designs and products with the help of mentors that they could sell and earn quick income. These ladies have started earning minimum wages which is funding their business. We are continuing to support them with skills in business, finance and marketing as per their needs with timely intervals through the program.

Mental health and Domestic violence Program
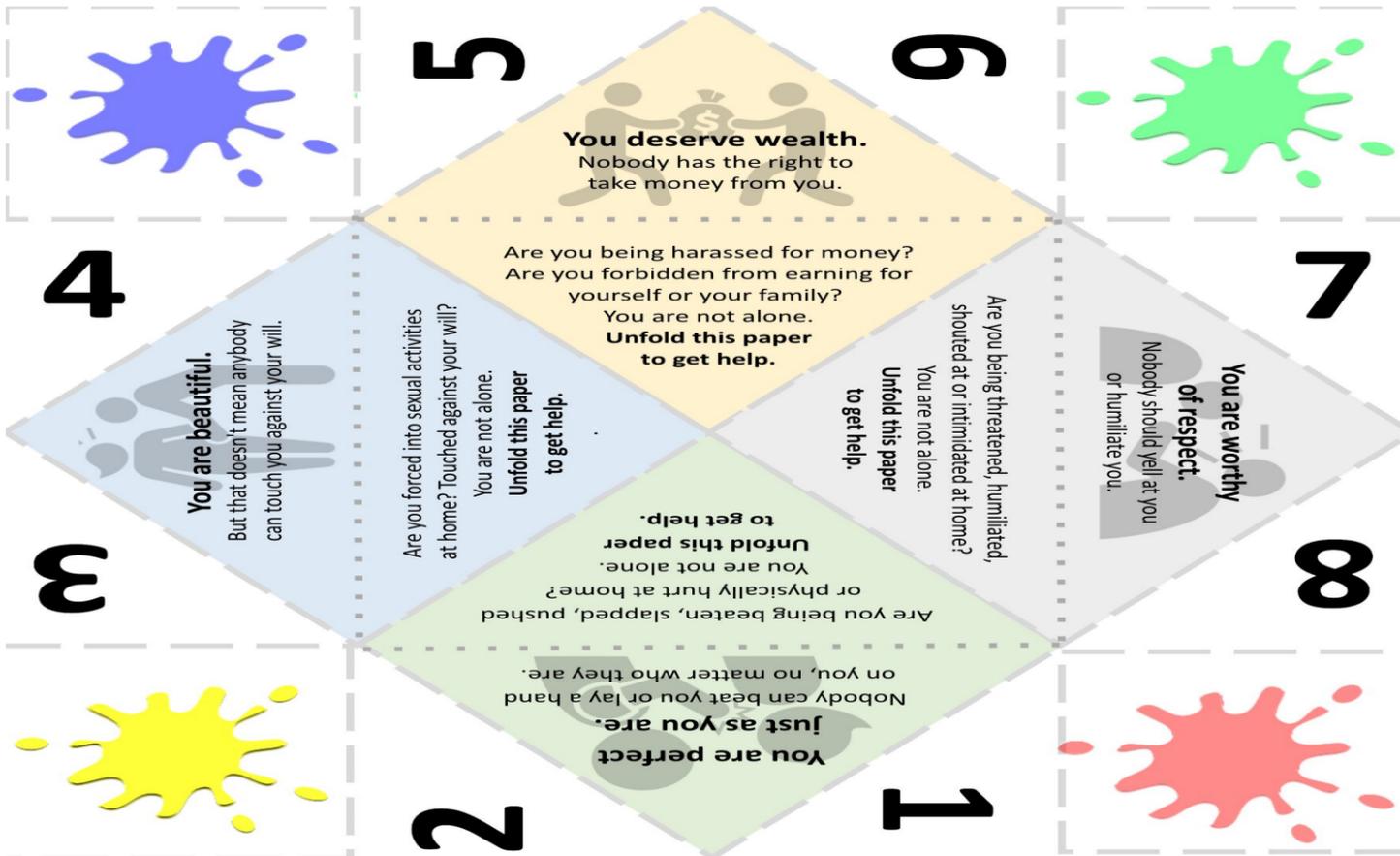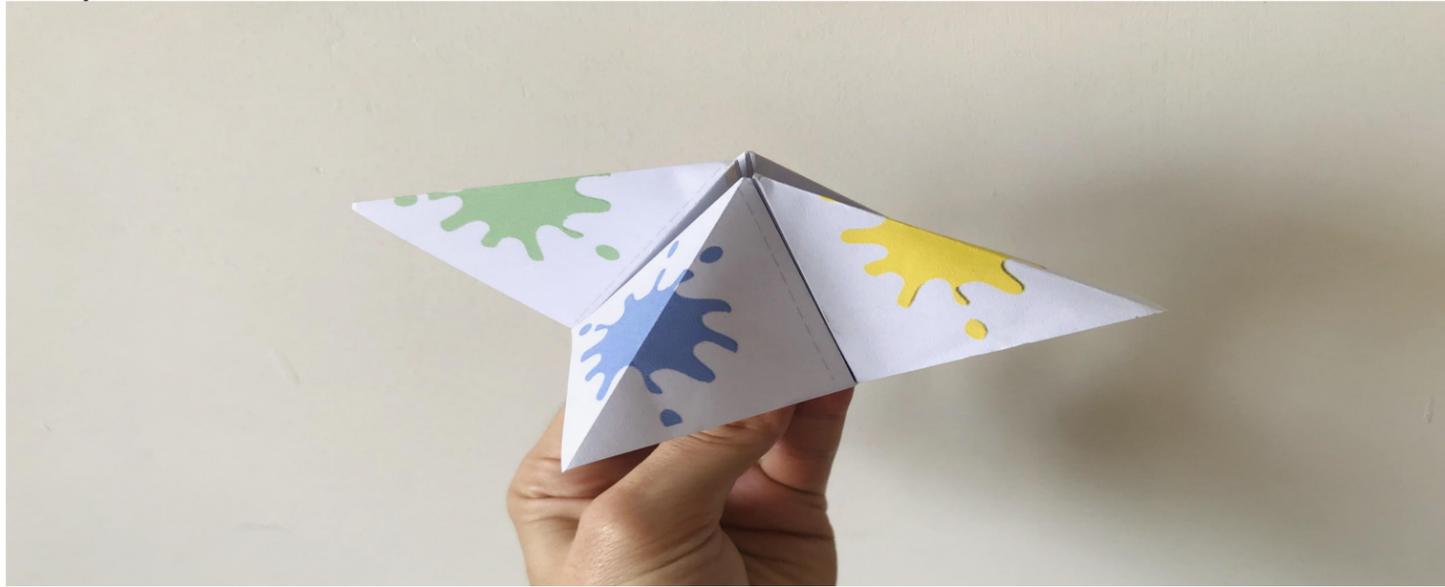
As the Covid infection rates were on the rise, so were the needs for additional quarantine in some communities. Although stay-at-home orders protected individuals from the virus, home wasn't safe for everyone. As part of this initiative, a part of the team constituted itself into a Mental Health group, aiming to spread awareness about mental health related issues in the communities that we work with. This led to the creation of a flyer that has been translated and shared across communities in Karnataka and Gahanga. The flyer provided information about mental health issues like depression and anxiety, shared a hotline number that people could call in case they felt they needed some help and offered some suggestions on how people can better take care of themselves during the pandemic.

Noting that there was a global rise in the number of domestic violence cases, and recognising that this would surely be affecting people in the communities that we work with, the Mental Health Group also created a flyer to spread awareness about different forms of domestic violence that can occur and share some helplines that offer support to victims/survivors of domestic violence. Owing to the sensitivity of the issue of domestic violence, particularly in families that are locked down together, the team designed a discrete and approachable model to convey information to affected persons. The design is in the form of a paper fortune teller, a game that is commonly played among little children.

The flyer is now being translated into 7 different languages and shared across Karnataka, Gahanga and Tamil Nadu. Partnerships have also been created with local women's organisations based in Gahanga (called Young Women's Mentor) and in Bengaluru (called Vimochana) to offer their professional expertise in dealing with domestic violence

Closing notes

Megha Bhagat, CGO

This year we saw the world display human resilience, solidarity and fortitude, slowly reverting to the community led mindset of thinking. Globally the conversation has started moving back to everyone coming together and taking care of each other, especially as we grapple with the more acute impact of climate change, global warming and man led disasters. While education and especially education of young children from marginalised communities got global attention the solutions seem to be still caught in the meanderings of the erstwhile models, with only cosmetic changes to its delivery.

With the world still finding its footing the coming year will be an interesting one to watch the evolution of discussions on solutions built with marginalised communities. DEFY will continue to hold the space for marginalised communities across the world to build and co build solutions that can serve long term for them. With several projects kicking off in different communities across the world we will continue to learn from the community knowledge on the ground and incorporate them into our expanding understanding of community led learning spaces.

With new programmatic interventions the coming year will be a testing ground for us to gather new knowledge and expertise in extending our scope of community impact beyond the self learning spaces. We will continue to build upon the foundations of community first and collaboration.

The coming year is an exciting time for us at DEFY as we look forward to building more partnerships, foster our continuing partnerships and continue on the path of building more connected communities. DEFY will continue to learn from communities to build resilience and solidarity incorporating it within its framework of democratising learning as a tool for community building. We will continue to reach out to all of you to continue to democratise education.

Project DEFY is a non-profit entity registered in Bangalore under DEFY EDUCATIONAL ORGANISATION (CIN: U80902KA2016NPL097014). It started with the vision to democratize education and bring the choice of learning back into the hands of people. Project DEFY, as the name suggests, is challenging the very design and imagination of education and education-spaces in India, Rwanda, Zimbabwe and many other countries of the world that continue to follow the 400-year old factory-model education.

Project DEFY is breaking the existing factory-model of learning by helping communities create their own schools, called NOOKs. The two tenets of its approach are - one- 'learning happens naturally' and two- 'information is available freely'. A quick snapshot here: https://youtu.be/TjrKl4-5sBI

Over the past 3 years we have created 16 self-learning spaces and 1 Nook Hub impacting over 10000 learners. We were also able to experiment in creating Nooks within institutional educational bodies such as schools and universities, in an attempt to change the system-design from within. Hear what some of the learners have to say here: https://youtu.be/SNXTq_vdK2w

More details and media highlights/publications are there on our website projectdefy.org