

Vigyan Ashram Status Report

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A] FabEd Workshop @ IIT, Powai

A Workshop on 'Fab Lab in Education (FabEd)' for selected IX std IBT students was held from 2nd – 6th Oct at Tata Center for technology development (TCTD) Lab at IIT, Powai. We have selected 20 students from Gawadewadi, Shirwal, Pokhari and Mukhai schools. They were selected based on their project ideas. These students learned digital fabrication tools viz. Laser cutting, CNC wood cutting shop-bot, 3D printing, milling machine etc. They learn design tools and made their projects using these machines. Following are important projects – i) Cow dung plastering machine ii) Foldable stool iii) USB hair clip iv) 3D printed jewelry v) Multipurpose measuring scale vi) Safety attachment to staircase etc. Detailed documentation of FabEd projects is available on www.vigyanashram.wordpress.com



Group photo of FabEd



IBT students showing their creation !

B] Exhibition:

- 1) Maker Mela : VA participated in Maker Mela exhibition organized by RiiDL Fab Lab @ Sommaiyya college, Mumbai on 10th and 11th Oct. We have demonstrated our projects in the exhibition. Yogesh also gave a talk on 'Fab Lab movement in India' on 11th Oct.
- 2) Agroone Exhibition :
We exhibited technologies like Rice De-husking, Egg incubator, food products, Hirda cutter etc at Agro-One Exhibition at Pimpri from 23th to 27th Oct. Approx. 10000 farmers visited our stall. We got more than 350 registrations for technologies and 2000 inquiries

for starting technology based agri-business. DBRT students sold food products of Rs.5000/- in the exhibition.



Maker Mela Exhibition



Agroone Exhibition – Visitors to VA stall

C] DBRT Update:-

i) Four new students joined DBRT October batch. Annual examination of Oct2014-15 batch was conducted on 8th and 9th Oct.

ii) Pipe line work: Water supply agreement was signed with Mr.Pandurang Barsode. He will share water from his well to VA campus for 2days/week. We will be using it mainly for fodder cultivation and campus use. DBRT students laid pipeline from his well to our field.



iii) DBRT students are working on fabrication of staircase for new kitchen. Approx. 80% work is complete.

iv) DBRT agri dept got produce of 23 Kg of chilly. 7kg was given to VA kitchen and rest of it was sold in Kendur market.

We have harvested 3 Kg Shepu , 1.75 Kg Coriander and 25 Kg – Weeds as fodder from Bio-bed in October.

v) DBRT students constructed Azolla bed on contract against order from Mr.Shinde (Chowdhari vasti).

vi) Kojagiri was celebrated on 26th Oct.

vii) Volunteers Tata Motors did 'Shramdaan' on 8th Oct. They have

planted 120 plants and also provided financial help to do fencing of plants. Some of them helped in organizing our library.



Kojagiri Celebration

D] DST core support project- Following are important updates on technology development.

- a) Training program for NGOs :
Training of network NGOs under DST supported project on 'Addressing migration and malnutrition in tribal population of Maharashtra' was conducted a Pabal on 21st Oct. We have introduced them with various rural technologies developed by VA for addressing problem of livelihood.



- b) Work is in progress on Bike mounted STP pump. This will be useful for spray pump and can be attached to motorcycle.
- c) A bailing press for dry garbage is under fabrication. This is as per the requirement from Greeny- The great ! for Shirdi Municipal corporation.
- d) 3 units of Incinerator are ready. They will be given for field testing. Another 7 units are under manufacturing.
- e) We are experimenting different types of composite materials sheets from waste material. It includes thermocol and plastic waste along with ferrocement etc.
- f) **Fab Lab :**



- i) Arduino workshop for Sahyadri school was conducted on 1st October 2015. It was attended by 20 students and 05 teachers. They learned arduino basics, programming with arduino boards, tinkering with LED's. They were given guidance on building their projects like making robot, Ultrasonic distance meter ,Street light controller using LDR ,Traffic controller etc.

ii) 3D printing workshop for 30 students of City International school was held on 9th Oct at DIY lab.

- iii) Mr.Sharad Sathe donated his old electronic measuring instruments and tools for experimentation. We are thankful for his support.

E] TIED (Supported by Praj Foundation)- Progress of Entrepreneur Fellow –

- Jayesh Dhayarkar – Jayesh placed for apprenticeship with Mr.Anand Gosavi’s polyhouse for 1 month. Jayesh has also completed 1 week goat farming training @ KVK Babhaleshwar.
- Prakash Nayak- He has completed his fellowship tenure of 4 months. He learned various workshop skills and worked on ‘Improvement of Rice De-husking machine’project. He left fellowship programme in between due to family issues. We are in touch with him and working on his enterprise establishment project.
- New fellows – Following 3 new fellows have joined for October fellowship batch. –

Fellows name	Address	Training area
Akshay Palkar	Wakad, Pune	Welding fabrication
Sorai Ram	Balrampur , Chhattisgarh	Welding fabrication
Phuleswar Ram	Balrampur , Chhattisgarh	Electrical , Motor re-wingding

F] Entrepreneurship Accelerator (STED)

- Vishvajit Murkute started his welding-fabrication business at village Mirajgaon in Ahmadnagar district. Vishvajit is DBRT students of 2013-14 Batch and he has invested Rs.1.5 Lakh for his venture.

- Kailash Kumbhalkar started his welding-fabrication and plumbing business at Pawni Village in Ramtek Taluka of Nagpur district. Kailash is our 2012-13 Batch DBRT students and we helped him to raise crowd-funding of Rs.70000.00 from RangDe micro-finance institute. More on his business and micro-finance



<https://www.rangde.org/borrower/microcredit/india/maharashtra/kailash/42322>

- Business and micro-finance proposal is prepared for Mrs.Savita Nyaneshwar. She is IBT instructor of Home & Health section in IBT-Pokhari School. She will be starting her beauty parlor. Her profile for crowd-funding is now uploaded on RangDe portal for rising Rs.40000.00 business loan. (More info- <https://www.rangde.org/borrower/microventure/india/maharashtra/savita/43024>)
- Meeting with DeAsara – Mr.Sunil Phatak and Mr.S.R.Joshi visited VA campus on 14th October. We have discussed possibilities for collaboration to promote technology based rural enterprises.

G] IBT Updates :- i] IBT in Maharashtra :

a) Azolla beds are made in Jamgaon, Valsang and Nagaj, IBT schools.

b) Lokmanya Tilak Vidyamandir(LTV), Chikhalgaon has given community services of Rs.40,000/-. They have set up a stall at exhibition at Grahak peth vile parle, Mumbai. They sold- chocolate, Popcorn, perfume, floating lamp for diwali, Lokdeep torch, etc.



c) Mrs. Sansare, Dy.Education

Officer visited to LTV, chikhalgaon on 28th October 2015. She appreciates IBT program and activities done in the school.

d) IBT schools from Mukhai & Pokhari village made agri tools - *Fawade & Datale*. It was made after need analysis of farmers at local level; it. Mukhai School has generated revenue of Rs.9570/- by selling agri tools. Pokhari got Rs.2000/- from this activity.

e) Hasur Khurd: Shree Laxmi Vidyalaya had set up IBT product exhibition at their school. They sold Vermi compost, Sugar cane seedlings, Utane, face pack, Phenyl, decoration article etc. & generated revenue of Rs.5000/-



f) H&H section: Savita Solse, Instructor- Pandharinath Vidyalaya, Pokhari school organized blood group testing camp (200 children; 30Rs/children)in the school and generate Rs.6000/-. She used this amount to buy sewing machine. She plans to uses it for training of IBT students and for her tailoring business.

ii) IBT in Chattisgarh : IBT program is in progress in all porta cabin schools in Dantewada. We are struggling to get funds for raw material from district administration in Bijapur – IBT school. Highlights of the IBT program, this month are :-

a) Electrical wiring in Karli school was burnt. IBT students done the entire wiring of school.

- b) Gumada school students constructed vermi composting bed.
- c) Bangapal - IBT students prepared plot for Potato.
- d) Agri – Following schools are supplying vegetables (लवको बैगन कदु टमाटर मिच बरबटो ग्वारफलो भिन्डी पलक मेथी धानिया) to their kitchen.

Name of the schools – Karli, Gumada, Mokhapal, Palnar, Bangapal, Kuvakonda, Kasoli



Vermi compost pit construction



IBT produce

iv)IBT in Odisha : IBT students in SSD Govt. Highschool, Sialati, Nuapada district fabricated an iron rack (size 8 *6*2ft) from scrap in the school.

iv) Meeting of all candidate Schools for IBT program in Pune district was held at Pabal on 13th Oct. We are planning to launch IBT in 5 new schools in Pune district.

H] DBRT update

i) Food Lab Sale : Bitter Gourd Mixed Pickle-15kg., Bamboo pickle-5kg, Ground Nut Chikki-20k, Puran Mix-1kg, Aonla Candy-20kg, Aonla Supari-10kg, Aonla powder-10kg. Total Sale : Rs.8890/-

ii) Dairy record- Not available iii) Goat farm : Not available

iii)Yogesh visited Rescue Foundation, Bhoisar on 10th Oct. The visit was to explore possibilities in rehabilitation of trafficking victims through livelihood training.

iv)Megger CSR team visited VA on 20th Oct. We had discussed proposal to start advanced electrical course at Pabal.



Shelf made in IBT Odisha

I] Other tit-bits-

- Yogesh gave a talk on 'Making schools factories of innovation and creativity' at Pune Inspire forum on 30th Oct.
- Ranjeet scored 2nd rank in Post Graduate Diploma in NGO Management course at S.P Jain Management Institute, Mumbai. He got his degree in convocation ceremony held on 10th Oct.
- Management committee meeting of Vigyan Ashram was held on 24th Oct at Pabal. MC members had reviewed progress of various project. Committee also took decision on construction of classroom, DIC project implementation etc.
- Yogesh attended Design Innovation Center brainstorming meeting @ IIT-Delhi on 17th Oct. He along with Prof.Dhavale (SPPU) visited Delhi University and IIT-Delhi innovation center on 16th Oct.
- Ranjeet attended DIC – Mentor meet of Soil Microbiology course at Pune University on 6th Oct.
- Article @ DIY lab and Maker movement on 25th Oct in Sunday- Pune Mirror:
<http://www.punemirror.in/others/sunday-read/PAYING-IT-FORWARD/articleshow/49519638.cms>
- VA visitor – 548
- Online visitor :
www.learningwhiledoing.in – New-625 , Repeated –73 ,www.dsttara.org – New-394 , Repeated – 56,www.vigyanashram.com – New- 1437 , Repeated –471 ,www.vigyanashram.wordpress.com – Visitor – 2370 , Viewers –988.
- Weather record – rainfall of the month – 80mm, Rainfall YTD – 449 mm, Max temp- 29°C , Min Temp – 9°C, Humidity –75% , Water height in well – 3.4 M
- Energy consumption record- Electricity unit – Three Phase - 853 KWH, Single Phase – 750 KWH , Quality – No. Of interruption- 142 , No supply – 13% , Normal Voltage - 82% , Low Voltage – % , High Voltage- 5%
- Diesel consumption for generator- 0 Lit , Two wheeler running- 480 Km.
- Biogas consumption – Dung used- 1445 Kg, Gas produced- 51.6 m³



Data Report Link-

<https://drive.google.com/file/d/0B3-4RfsZ2K2OZmdFdGozc1k0enM/view?ts=56617f3a>

(Work of Vigyan ashram is also supported by Asha for Education, INDUSA, UNICEF, Govt. Of Chhattisgarh, Lend-a-hand-India, Suzlon foundation, Megger (I) Pvt Ltd, Eton (I)Pvt Ltd, Dept of S & T , RGSTC, Praj Foundation and Many Individuals and foundations)

Photo Gallery:



3D printing workshop @ DIY lab



Industrial Earthing training – DBRT students



Yogesh giving talk at Pune Inspire



Sarpanch of Pabal village planting tree @ VA



Dassera Tools Pooja @ VA



Valasang IBT – Azolla bed

For regular update : <https://www.facebook.com/vigyan.ashram.pabal>