

Vigyan Ashram Status Report

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A] Vigyan Ashram on Maker Tour Map : A French not for profit organization 'Maker Tour' is documenting Makers Lab all over the world. They have documented more than 50 labs across Europe. They visited Vigyan Ashram on 25th/26th May. Documentation and video made by them is available online on http://www.makertour.fr/fiche_identite/vigyan-ashram/

B] Small Ideas : Useful Innovations

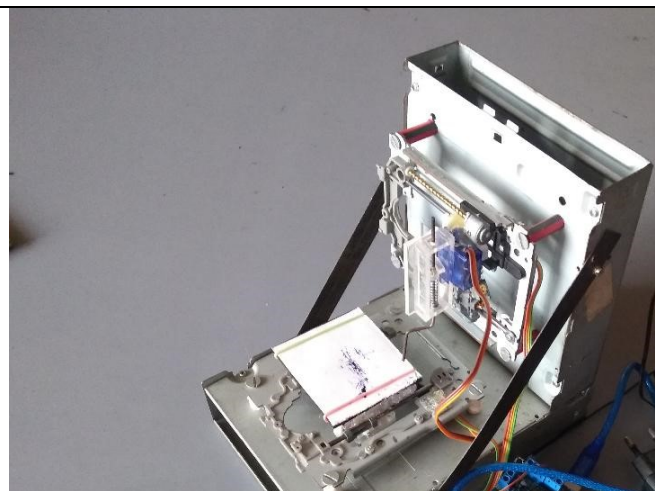
DBRT and DIC students are working on various small projects. Here are some snapshots of them.



Chetan's scissor got broken. He made 3D printed handle and made it usable



Safety hat for Farmers : It provides protection for Eyes and Face to farmers while working in sugarcane farm.



DBRT group completed DIY CNC plotter from waste DVD writers and Arduino CNC shield.



DBRT Students made hole maker for mulching

C] TEDx Pune on 9th September

Yogesh delivered talk at TEDxPune event. He gave talk on Vigyan Ashram's philosophy of 'Development through Education'. It was good experience to present our thoughts in shortest time limit. It also gave us opportunity to network with others. Talk video will be available online.



D] First batch of food processing under MSSDS

Vigyan Ashram is registered Vocational Training Provider under Maharashtra State Skill Development Society (MSSDS). We got approval to conduct first batch food processing training with 20 students. Training was started on 22nd Sept. Duration of the training will be 90 days. Govt of Maharashtra will pay cost of the training on its completion. System for Biometric & Adhaar linked attendance for students and trainer to MSSDS portal is installed. Vishal made several trips to Pune & Mumbai to overcome the teething issues.

E] Fab Sky Lantern Making workshop :

We are conducting series of workshop to make SkyLantern using simple electronics. We have made PCB boards and supplying them with required components and sensors. Camps are taking place in Pabal as well as in DIY lab. Student made their lanterns using Laser cutting machine at Pabal. Total 42 students participated in workshop on 16th -17th (DIY), 18th -19th (VA), 24th (DIY).



F] IBT Updates:

- **IBT instructors training** program for new IBT schools was conducted from 23rd Sep to 28th Sep 2017 at Pabal. Total 25 instructors from 9 schools participated in the training. 8 instructors were from Tamilnadu schools supported by Nalanda foundation and remaining from schools supported by One Step CSR initiative of L&T Infotech Ltd. Instructors were introduced to IBT practical activities from 1st year syllabus along with learning while doing and design thinking teaching methodology. Major topics covered were carpentry, welding work, food processing, soil testing, electrical wiring, etc. To understand IBT lab setup all instructors visited Dhamari school.
- **IBT Lectures through Video Conferencing:** Number of schools joining online lecture increased to 13 schools. We have also upgraded our computer and purchased essential systems to make lectures effective. Following sessions were conducted this month.
1st Sept : Engineering Drawing (Yogesh) ; 9th Sept : Grafting (Ganesh) ; 16th Sept :Earthing (Yogesh), 23rd Sept : Water testing (Ranjeet) , 29th Sept : Dumpy level (Yogesh)

- **IBT Highlights :**

- i) IBT Village development committee meetings at : Chadwel (27th Sept), Aichale(15th Sept), Tilali (5th Sept), Thangaon(9th sept),Valsang(25th Sept),Amkhel (20th Sept), Nagaj (26th Sept)
- ii) Animal vaccination camp : Nagaj, Ghatnandre (9th Sept – 50 animals); Tilali - 25 animals)
- iii) Tilali school harvested 10kg of ladyfingers vegetables and sold it for Rs.400/-. They are expecting 60kg more vegetables in coming days.
- iv) Malvan school collected 1000 kg Ganesh Pooja waste from sea shore. Organic waste was used for preparing Vermi compost. Malvan Municipal corporation helped school by providing vehicle to transport waste garbage.
- v) Bargaon Pimpri IBT students prepared four showcase cupboards in engineering section. Total cost incurred Rs. 13800. The selling price of the cupboards is Rs.18000.
- vi) Vigyan Ashram received Kruti sanman purskar from Maharashtra Rajya Shala Kruti samiti on 21st sept in function held in Pune. Mr.Ganesh Pingale accepted award on behalf of Vigyan Ashram.



Harvesting Lady finger crop

G] IBT CG

- i) Sachin visited Dantewada and Bijapur from 19th – 21st Sept. He met collector and Govt officials. Work order for DIY lab and IBT program was released & now we are waiting for payment to start work. Bijapur administration also released funds for first quarter.
- ii) Process of selection of IBT co-ordinator and DIY In-charge has started.

H] DBRT Updates:

- i) Inauguration of Room no.2 : DBRT students carried out renovation of Room no.2. A small kitchen, false ceiling and plastering of walls, electrical wiring, plumbing etc was done. This room will be used by Director-VA. Renovated room was inaugurated at the hand of DBRT student Ganesh Dhotre. IIE BOT



Member Secretary Dr.Kalake, Dr.Sharad Jawadekar, Mr.Ashok Kalbag and all committee members were present on the occasion.

ii) DBRT students are busy in their project work. Following are some of the projects in progress.



iii) Computer Trainee girls have undertaken community service of digitalisation of Marathi books. They have scanned two books by Dr.Naraliker and Dr.Mrs.Naraliker गणितीच्या सोप्या गोष्टी ; गणितीच्या गमती जमती.

iv) Computer course girl students are also doing online data feeding of 1000+ soil testing report of farmers.

v) Animal husbandry: 03 goats died on 25th Sept. They went for grazing in the field and fall sick after returning. We are suspecting food poisoning from grass. It was major loss and we are taking corrective action to avoid such incidence in future.

vi) Biogas plant maintenance work was done by DBRT students. Piping was changed.

I] Update - Technology development & Design innovation centre:

i) Fabrication of bailing machine for plastic waste is complete. Trials were taken at Pabal. Now the machine is under testing with waste management company M/S Greeny the great. Using the machine, we can get 66% volume reduction by manual efforts. Machine also has provision to bundle the compressed plastic by thread. It can handle 5kg of plastic waste at a time. Video on : <https://goo.gl/DsbvaV>

ii) We are initiating project of installing and testing of heliostat at Pabal. This is a project in association with Bhabha Atomic Research Center. We have got permission from Gram Panchayat, Pabal to install heliostat at open grazing land near Vigyan Ashram.

iii) Vigyan Ashram has signed MOU with RiIDL (Maker Mela) as Eco-system partner for Maker Mela. Maker Mela will be held from 11-13th Jan 2018 at Mumbai.

v) Vigyan Ashram is in 4th year of DST core support. To carry our video documentation of the work done under 2nd phase, we have asked our DBRT alumni Mr.Darshan Dixit to prepare 4 min video film of the project. Darshan is professional cameraman and works for TV serials. He carried out shooting on 26th - 28th Sept.



vii) Dr.Girish Sohni, Chairman of BAIF visited VA on 4th Sept. We have discussed several ideas and projects that can be taken up in collaboration.

viii) Agri Exhibition – Vigyan ashram participated in agricultural exhibition on 10th & 11th September organized by Pune District Central Co-operative Bank (PDCC). We have exhibited soil moisture sensor , rice de-husking, sugarcane farmer cap etc. We got good response from visiting farmers.

ix) Yogesh had a meeting with Mr.Pramod Choudhari, Chairman of Praj Industries on 28th Sept about 'Technology Business Accelerator' at Vigyan Ashram.

x) Barefoot college, Tilonia team visited VA on 29th to study Fab Lab. They are planning to establish Fab Lab at Tilonia. Similarly Dr.Bhide and Mr.Sandeep Natekar of Muktangam Exploratory visited VA on 25th. We are helping them to establish Fab Lab.



J] Entrepreneurship Accelerator

i) Mr.Geetaram Kadam started his Electromagnetic drying unit at Nhavara village. We are supporting him in establishing protocol for drying. Dr.Yogesh inaugurated the plant on 22nd Sept.



Electromagnetic dryer at Nhavara



Rice dehusking machine installed at Nasik

ii) One unit of rice de-husking machine was fabricated & delivered to Mr.Mahesh Jagtap at Panchvati Nasik. He is starting brown rice business with his own brand, so far, he has de-husked 100 Kg of paddy as trial production.

iii) Yogesh, Suhas and Suyog visited Falode village near Bhimashankar on 2nd Sept and had a meeting with village youth group. They are running a nanchani laddoo unit and want to expand. We will help them in technology training and packaging.

K] MC meeting on 24th Sept : Management Committee of VA was held at Pabal. Meeting was attended by MC members Mr.Vijay Kumar, Mr.Sunil Kulkarni,Mr.Ashok Kalbag,Mrs.Anjali Chipalkatti,Mrs.Pallavi Shanbag. New board of trustees of IIE Dr.Kalake and Dr.Jawadekar joined as new MC member. Design of

new hostel construction was discussed with Architect Mrs.Chaitali Brahme. Review of existing projects and issues in implementation were discussed and decisions were taken.

L] Other tit-bit :

- i) Pune Municipal Corporation gave permission to conduct D-I-Y camp in 10 PMC run schools.
- ii) Ranajeet & Rahul attended 1 day training program on PFMS (Public finance management system) @ Institute Of Government Accounts And Finance Regional Training Centre , Mumbai on 6th September. PFMS is online financial management system for all government funds & projects. DST wants us to upload all our accounts on the portals.
- iii) Dassera was celebrated with Pooja of all tools and machines.
- iv) Yogashri has joined as DIC fellow. She is M.Tech (power system) and will work on energy projects.
- v) Dr.Arun and Supriya visited MIT Alandi. We have signed MOU with them for DIC projects for their students.
- vi) Visitors to Pabal campus - 542
Website visitors : www.dsttara.org – 785 (New-478 , Repeated –307),www.vigyanashram.com –1780 (New visitor –1152 Repeated-628) ,www.vigyanashram.wordpress.com –1970 (Visitor- 1311 Viewers- 659)
- v) Weather record – Rainfall – 161 mm (Total 713 mm) ,Max temp-28°C , Min Temp – 25°C , Humidity – 75%, Water height in well – 3 mtr .
- v) Energy consumption record- Electricity unit – III Phase-868 unit, I Phase-875 unit. Quality of power: Number of interruptions: 29, Normal voltage: 64.2 % , No supply: 8.8 % , low voltage: 0 % , high voltage : 0. % , Data not recorded :27 % (Data logger was non-operational for this period)
- vi) Biogas consumption – Dung used- 140 Kg, Gas produced- 4.76 m³.

Data Report:

https://drive.google.com/open?id=0B_Jk2xLqAXjcZkNldmliREJ6STZhN3N0emZVSXc2RHVoLXFv

For Regular update: www.facebook.com/vigyan.ashram.pabal

Our sites : www.learningwhiledoing.in , www.dsttara.in , www.vigyanashram.wordpress.com , www.vadic.wordpress.com , <https://ruralstartup.wordpress.com/>

Photo Gallery:



Testing of Ganesh immersion using Ammonium bicarbonate



DIC computer session in progress



Dr.Girish Sohni visiting Aquaponic on 4th Sept



Showcase made by IBT girls



3D printing at DIY Lab



Mr.Ganesh Pingale accepting 'कृतीशील संस्था पुरस्कार' on behalf of Vigyan Ashram



Bargaon pimpri IBT supplied 60kg Chikki to शालेय पोषण आहार



DBRT students maintaining Tomato plants

(Work of VA is supported by Asha for Education, Praj foundation, EATON Foundation, SPA Education Foundation, Megger (I) Pvt Ltd, Tata Motors, L & T Infotech, INDUSIA Endowment, Unicef, Govt of Chhattisgarh, Nalanda (ILFS) foundation, Savitribai Phule Pune University, Lend-a-hand-India, Suzlon foundation, Fab foundation, Dept of Science & Technology, and many individuals and foundations)