# Vigyan Ashram Status Report

Volume 35 Issue 2 February 2017 In this issue

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- Workshop on editing Marathi wikipedia pages
- Ashram is busy with DIC and Fab academy projects
- Vigyan Ashram's information is on display on 'Science Express' Train

## A] Advance electrician training program -

Advanced electrician training program was conducted at Pabal from 4<sup>th</sup> to 8<sup>th</sup> Feb. It was organized with the support of Megger India Pvt Ltd. Training was aimed to introduce new techniques & advanced tools used in electrical field. Total 21 youths studying wireman course at ITI attended the training.



They learnt use of instruments like digital earth tester, Insulation tester etc. Mr. Anand Waghchaure (senior



Marathi wiki workshop

engineer) from Meggar (I) Pvt Ltd. Mr.Prakash Shah (Arn Vidyut shala) and Mr.Thorat(Khed SEZ) were invited as guest faculty. We have made instruction videos as learning material. Following are the u-tube link:

Introduction to advanced electrical tools - <a href="https://youtu.be/mjAfZ0IHWkM">https://youtu.be/mjAfZ0IHWkM</a> ; How to use insulation tester - <a href="https://youtu.be/tjdQQulksOQ">https://youtu.be/tjdQQulksOQ</a> ; Using advanced earth tester - <a href="https://youtu.be/5aUI2GiHheY">https://youtu.be/5aUI2GiHheY</a>

**B] Workshop on Marathi Wikipedia:** A workshop was organized to edit articles on Marathi Wikipedia for 20 girl students of computer course. Mr.Subodh

Kulkarni (Center for Internet & Society) was resource person. It was hands on workshop and students learn to edit articles, post new articles, photo etc on Marathi Wiki. We are planning to give them incentives to write more articles on wiki. Following articles were edited during the workshop. विज्ञान आश्रम

https://mr.wikipedia.org/s/307h; पाबळ https://mr.wikipedia.org/s/300s; कन्हेरसर

https://mr.wikipedia.org/s/306p; केंद्र https://mr.wikipedia.org/s/3070; भैरवनाथ मंदिर, पाबळ

https://mr.wikipedia.org/s/3078; श्री पदममनी जैन कॉलेज पाबळ https://mr.wikipedia.org/s/307w

**C] DBRT Update**: DBRT Students are busy working on their projects. Following are some of the highlights -

- Engineering students fabricated storage racks and working table for fab lab. They also fabricated window grills for new classroom building. Total value community services of workshop during month was Rs.73,945/-
- Energy & Environment students made new Phase electrical connection agricultural department and also learnt to install CCTV camera.
- During Fab class, DBRT students made drillbit mounting stand by using lesser cutter and also worked on arduino based automated bell. More information please visit - http://sandeepmoreva.blogspot.in/2017/02/fablab-lasercutter-task-drillbit-stand.html
- One male goat buck & 500 poultry chick died in February month in Animal Husbandry & section. Poultry chicks died due to bacterial infection, while goat buck had food positioning & heat stroke. We are taking necessary actions to avoid such incidences in future.
- Food lab section put stall of their products in Pabal yatra on 9th Feb.
- Bakery Course Updates Students learnt basic baking skill in bread, toast (rust), making cookies using firewood furnace. VA
  - alumni Rajesh Padvi from Nandurbar is invited as a faculty. While learning various baking skills students also earned community service of Rs.11000 by selling their products in campus & weekly market.
- Mr.Sridhar Varma & Mr.Rohit Saroj from TATA motors CSR team, visited Vigyan ashram on 23rd February to review progress of DBRT & other short term trainings supported under TATA Motor CSR.
- DBRT students Riaz, Amar and Sairaj participated in Science exhibition @ Giant Metro Radio Station (GMRT, Khodad) on 28<sup>th</sup> Feb. They presented various projects done under DBRT course viz. precision farming sensors, brick picking device, folding chair etc.



Fab Lab rack & table fabricated by DBRT



- We have installed biometric attendance system linked for portal of Chattisgarh and Maharashtra Kaushalya vikas scheme.
- For more details: <a href="https://vigyanashramdbrt.wordpress.com/">https://vigyanashramdbrt.wordpress.com/</a>
- For Photos of DBRT activities: http://vigyanashramdbrt.blogspot.in/

## D] IBT Updates: – a) IBT Maharashtra -

 IBT tools and setup are installed and setup is upgraded in 6 schools in Pune district with the support of L&T Infotech CSR.

 Under Praj Foundation supported model School project –

- Shri.Vinayak Kelkar and Ganesh Pingle visited to Lokmanya Vidyamandir, Chikhalgaon, Malvan, Vadacha pat schools on 12<sup>th</sup> – 15<sup>th</sup> Feb to review progress of model school project.
- ii) IBT students of Kurze School fabricated table for School in workshop department worth Rs.3500/-



- iii) Students from Aadarsh Prashala Nagaj (Dist-Sangali) School assembled solar lamp as part of energy & environment section learning activity. Students sold this lamp to School teacher and earned community service of Rs.3200/-
- iv) Students from Dnynganga Vidyaniketan, Manchihill (Dist-Ahmadnagar), constructed foundation plinth for newly purchased neem oil expeller and also fabricated 10 tree guards worth Rs.16000/-.
- v) 54 students from Jynananda vidya mandir IBT schools attended 3-D designing & printing workshops at IBT.
- vi) Midline survey activities were designed for conducting impact assessment of IL&FS supported



Foundation of this machine is made by IBT students

- IBT Schools. Midline survey is being conducted for 458 students from 4 IBT and 2 non-IBT Schools to test impact of IBT program.
- vii) IBT-Village development committee (VDC) meetings were conducted in 7 Schools in Nandurbar & Sangli region under Suzlon foundation supported IBT Schools program.

## b) IBT Chhattisgarh -

i) Five porta cabin Schools in Dantewada district are selected as 'Model IBT School' program. These



Schools are selected on the basis of their overall performance during last 5 years of IBT implementation. They will be provided with additional tools; equipment's and upgraded infrastructural support.

**ii)** Students from 7 porta-cabin Schools participated in YUVA JAGRAN SAMBHELAN at education city Jawanga (Dist-Dantewada) on 21<sup>st</sup> Feb. It was attended by honourable chief minister of Chhattisgarh state Dr.Raman Singh. We have

exhibited food products, handicrafts & IBT projects and also gave information about IBT program to visitors.

## E] Update - Technology development & Design Innovation Centre

i) Progress of some of the projects is as follows:

Student	Project	Status
Ms.Komal Raut	Developing evaporative cooler for VA Kitchen	A system with a pump, two fans one exhaust fan and gunny bag water pad was fabricated. Initial drop of 5 to 7°C was noted. Trial are now underway to get the balance of lower temperature and humidity
Ms.Preeti Pansare	Developing modular terrace garden model	A structure with PVC pipe and shed net is constructed on terrace of Ladies hostel. Bentonite, vermiculite, coco-peat, rice husk was tried in different trays for Methi.
Mr.Vipul Daware	Developing Rava roster for solar Scheffler	Fabricated roster drum for solar. The stand for mounting drum and motor is under process.
Mr.Meghraj Chadchandkar / Ameya Kulkarni	Bio-Drum : To develop aerobic decomposer for mineralization of urban organic waste	Drum was operated in VA Pabal with approx.1 kg of garbage per day. Garbage was getting dried faster than decomposing. Drum was shifted to Pune for field trial.

ii) More updates and projects on: <a href="https://www.mindmeister.com/756684001?t=63A2KkwqXc">https://www.mindmeister.com/756684001?t=63A2KkwqXc</a>

iii) Projects of Fab Academy students on : <a href="http://archive.fabacademy.org/2017/fablabvigyanashram/">http://archive.fabacademy.org/2017/fablabvigyanashram/</a>

iv) Following special lectures were organized for DIC-Fab Academy students >



Parametric Design using solidworks (3<sup>rd</sup> Feb): Mr.Sandeep Shinde; Solidworks basics & modeling (6<sup>th</sup> Feb): Dr.Subir, Autodesk-Fusion 360 (13<sup>th</sup> Feb):Dr.Yogesh Kulkarni, Basic Electronics (16<sup>th</sup> Feb): Suhas, Project Management (17<sup>th</sup> Feb):Mr.Vilas Rabde, Computer controlled machining using Shopbot (23<sup>rd</sup> Feb): Mr.Sandip Anasane, Ms Apeksha Bochare at COEP.

#### **Special Lectures for DIC-Fab Academy**

- v) Mrs Sayali Joshi of SHRISHTI ECO RESEARCH INSTITUTE along with Mr.Parag Karandikar visited VA on 20<sup>th</sup> Feb to discuss grey water recycling project. Yogesh visited Mr.Shrinivas Khare on 16<sup>th</sup> Feb to understand natural composites structure using bamboo.
- vi) Thanks to Dept of Science & Technology. Vigyan Ashram's project information is displayed on Science Express coach No.11. This train will tours all over the country.
- vii) Please read article about VA in written by Japanese visitor: https://fabcross.jp/topics/tks/20170208\_vigyan\_ashram\_01.html



## F] D-I-Y Lab Workshops:

i) We have conducted 7 workshops for students of Pratham Foundation in February. Each workshop was for two days and with 15 students. Students learned basic electronics, agriculture and carpentry while doing 10 different projects.

ii) Project making workshop for students of Muktangan exploratory was concluded on 25<sup>th</sup> Feb. All students presented their project work and documentation.



## G] Entrepreneurship accelerator program -

- a) Mr. Manesh Thate Started, NANASHRI Fabrication workshop at Kendur village near Pabal. Mahesh is our students of 2014-15 batch. Now he wants to expand his business, We are guiding him to get microfinance support of Rs.1 lakh through Rang-De.
- b) Mr.Dhiraj Sharama started *OM METAL WORKS*, a metal bending unit at Shirur (Pune). They are manufacturing sheet metal products viz. grain boxes, brief-case etc. Dhiraj has attended

- 'Entrepreneurship development training program; during December 2016. We have supported him under STED project.
- c) Mrs.Jayshree Pankaj Banger started tailoring unit at Ganegaon (Tal-Ambegaon, Dist-Pune). She is providing sewing services in village.
- d) Two bikers from Scout My Trip Mr.Vineet Rajan and Deepak Ananth visited Vigyan Ashram on 4th Feb on behalf of Rang De. They are raising funds for our micro entrepreneurs by their campaign. https://www.facebook.com/scoutmytrip/

## H] Other tit-bits

III.

- I. Team of officers from 'District soil survey & soil testing laboratory' and 'State agriculture department' conducted on-field inspection of VA soil lab on 3<sup>rd</sup> Feb. We have applied for becoming authorised lab for
  - 'Soil health card' mission of Govt of India.
- II. Ranajeet attended 'System Design for base line study 'boot camp at Pasali(Velhe) on 7th, 8th & 19th Feb for preparing 'system design' document for Skills on wheel project. We are planning to experiment new cost effective model of skills training for marginal communities in collaboration with Paoolwatt foundation.



Ms Cindy Kohtala from Alto University
Skills on Wheel: Discussion on Designing System
(Finland) visited VA for 1 week from 26<sup>th</sup> February for studying Fablab. She is doing her post doctorate research on Fab Labs.

- IV. Sachin presented seminar on 'Goal setting and career building' at B.D. Kale Sr. college, Ghodegaon on 27<sup>th</sup> Feb
- V. Yogesh gave following invited talks: a) Sustainable village development (4<sup>th</sup> Feb)@ Gokahle institute of politics and economics b) Education for inclusion (14<sup>th</sup> Feb) @ IIE c) Role of Skill Development for Youth Empowerment & Nation Building (18<sup>th</sup> Feb) @ MITSOM College
- VI. Mr.Pierre LABURTHE the Attaché for Innovation & Multimedia, French embassy visited VA on 15<sup>th</sup> feb to understand our program on science & technology.
- VII. We are thankful to following donors for supporting VA Mrs.Mira Karnik, Mrs.Veena Joshi, Followers of Kusum Soham Parivar
- VIII. During February month 941 schools & college students visited Pabal campus as their study tour.
- IX. Weather record Rainfall 0 mm (Total 333.18 mm) ,Max temp-33.9°C, Min Temp 13.42°C , Humidity 65 %, Water height in well 7.07 Meter.
- X. Energy consumption record- Electricity unit III Phase -1078, I Phase -796. Quality of power: Number of interruptions: 68, Normal voltage: 94.28%, No supply: 2.62%, low voltage: 0.59%, high voltage: 1.36%
- XI. Biogas consumption Dung used-547 Kg, Gas produced- 39.02 M3.

Total visitors to www.vigyanashram.com - 1315 (New visitor - 887 Repeated-428), www.dsttara.in : Total Visitors: 598 (New- 498 , Repeated -100 ).

## **Data Report:**

## https://drive.google.com/open?id=0B\_Jk2xLqAXjcd2NVT0pvdHRWVW4yc1J3LVFuV1RYWHo0Tlcw

(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, INDUSA Endowment, Unicef, Govt of Chhattisgarh, Nalanda (ILFS) foundation, Savitribai Phule Pune University, Lend-a-hand-India, Suzlon foundation, Dept of Science & Technology, and many individuals and foundations)

**Photo Gallery:** 



Tata Motors CSR team talking to DBRTstudent



Science exhibition at Khodad



**Bakery Training in progress** 



OER content testing at Pandharpur School



DIY Lab workshop at JPNC



Cindy with Fab Lab team

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