

Vigyan Ashram Status Report

Volume 36 Issue 1

Jan 2018

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A] Fab Academy 2018 Course:

A global Fab Academy class started from 17th January 2018. Total 84 labs around the world are participating in the program. This is a 6 months course in which Dr.Neil Greshenfeld from MIT conducts



video conference class on every Wednesday. Students work in the Fab Lab for rest of the week and work on their assignments. This year, Vigyan Ashram has eight students enrolled for the course. We have one student each from Bangladesh, Bhutan Fab Lab. Barefoot college (Tilonia, Rajasthan) also send their staff member to do Fab Academy at VA. These students will become Fab Lab Managers on

completion of the course. Suhas is our chief instructor supported by Supriya, Suyog and Arundhati. In preparation of the course, we have ordered Fab lab inventory, set up video conference facility with 52" LCD TV screen. You can visit Fab Academy page of Vigyan Ashram on:

<http://fab.academany.org/2018/labs/fablabvigyanashram/>

B] DST Experts Visit to Vigyan Ashram

VA is receiving long term core support from Dept of Science & Technology (Govt of India). We are in the



last year of five-year core support. As a part of its evaluation, DST constituted experts team comprising of Dr.Sunil Agarwal (DST,SEED Division,New Delhi) Prof.Hoysall Chanakya (IISc, Bangalore),Dr.Adarsh Kumar(IARI, Pusa, Delhi), Prof. N.G. Shah(CTARA,IIT,Mumbai), Dr.Rajendra Jagdale (S&T Park,Pune) and Dr. S.K. Khare (IIT, Delhi) visited VA on 19th & 20th January. They had reviewed the projects done under core support in

the past 3 years as per approved CORE project activities. They have given their valuable feedbacks on

technology development projects. Team also visited our partner M/C Climber Engineers, who are commercializing our incinerator and rice dehusking machine. Team also visited IBT program in dhamari village, Egg incubator manufacturing workshop of our alumni entrepreneur Mr. Anil Gadhe. We also visited our core field area of Velhe and our work with Paoolwat foundation at village Pasli.

C] Vigyan Ashram in Maker Mela !

VA was an Eco-system partner for Maker Mela organized by RiiDL (Sommaiyya college, Mumbai) from 13th – 16th Dec. It is biggest gathering and exhibition of Makers. We have displayed 10+ projects in 8 stalls. 16 members of VA, managed the stall and gave information to visitors. We have demonstrated commercial version of our router and DC Laser machine. Supriya and Suvarna gave investor pitch for their project. It was good exposure for DIC and DBRT students to visit Mumbai and demonstrate our projects.



DBRT students project @ Maker Mela

D] Hygiene Box to Saswad Municipal Corporation

Saswad Municipal Corporation wanted a solution for safe handling of sanitary waste on their garbage collection van. DIC student Siddhesh designed and manufactured 'Hygiene box for hygienic & safe' collections of used sanitary pads. These boxes are fabricated in FRP and mounted on garbage collections vehicles. Total of 6 boxes are installed and trial tested for its application. (video link

<https://www.youtube.com/watch?v=uOZtex6oWU8>)

E] TEDx talk of Dr. Yogesh Kulkarni on 'Education through Development' is available online on :

<https://youtu.be/wK5fGsv7SR0>

F] IBT Updates:

i) Instructor orientation & training program was conducted at Pabal on 23rd and 24th Jan. Total 22 instructors from 7 new IBT schools participated in the training.

ii) Director and senior officials from IL&FS visited IBT programme at Kulswami Khandaray Vidyalaya, Hiware on 11th January to understand IBT implementation.

iii) A Standard Operating Procedure (SOP) document for IBT program is ready and available. Nalanda foundation helped us in making IBT- SOP. It is available on :- <https://goo.gl/kmjRtq>

iv) 360-degree annual review meeting of Suzlon supported schools was conducted at Ghatnandre, Sangli on 17th Jan 2018. Sachin and Kailash presented progress report of schools.

सासवड शहरात कचरा संकलनासाठी हायजीन बॉक्स

पालिकेचा नावीन्यपूर्ण उपक्रम
सासवड : प्रतिनिधी

‘स्वच्छ ससेस’-२०१८ मध्ये सासवड नगरपालिकेने विविध उपक्रम राबवून या मध्ये आपली वेगळी ओळ. घनकचरा संकलनासाठी पर्यायी घट्टागडदोळे व्यवस्था आहे. घाटोराख घाटानु निर्माण होण्यासाठी नैर्घिन कचऱ्याच्या शास्त्रोक्त संकलनासाठी प्रत्येक घट्टागडदोळ हायजीन बॉक्सची व्यवस्था केली असल्याची माहिती मुलाखतीकरा विनेर जळक यानी दिली.

सासवड नगरपालिकेच्या हाट्टेन प्रत्येक महिन्याला ४० ते ४५ हजार सॅमिटी नैर्घिन कचऱ्यामध्ये इना श्रुतल हे सॅमिटी नैर्घिन सफाई कर्माचाऱ्यांच्या वेगळेत आल्यामुळे त्यांना आरोग्याच्या समस्या निर्माण होण्याची शक्यता असते, त्यांचे हे वापरलेले नैर्घिन सत्वावर इतर घट्टागडदोळे नागरिकांच्याही आरोग्याला आसपासकार आहे त्यामुळे नागरिकांनी असा कचरा पालिकेच्या घट्टागडदोळ हायजीन बॉक्समध्ये घाडा, असे आवादान मुलाखतीकराी करूंक घाणी केले आहे.

सॅमिटी नैर्घिन कचऱ्याची समस्या सोडवण्यासाठी सासवड नगरपालिकेने चाकळ वैधीन विज्ञान आसपासवील सिट्टेन सक्ती या विद्याथऱ्यांच्या मदतीने ५० लिटर क्षमतेचे हायजीन बॉक्स तयार करून पालिकेच्या प्रत्येक घट्टागडदोळ बसविले आहेत. या बॉक्समध्ये हायड्रोजन पेरिऑक्साईड या द्रव्याचा वापर करून वापरलेल्या सॅमिटी नैर्घिनचे निःशुद्धीकरण केले जाते व त्यावेळ नैर्घिनचे दुर्गंधित वजन विलेनट लावणी जाते. पालिकेच्या पाच घट्टागडदोळ आणि घरा ट्रेनटरत हायजीन बॉक्स बसविले असून, कचरा हाताळण्याचा कर्माचाऱ्यांच्या आरोग्याची सुरक्षितता वाढून या बॉक्सचे विज्ञान कचऱ्यात आल्याने कळक यानी सांगितले. याप्रसंगी नगरप्रमुख मांडे

पौडे, उदमराज्यक्ष निवृध वडने, पट्टेया आनंदीकराकी वताण, आरोग्य समितीचे सभाशी अजित जगताण, आरामेकर संदीप कताण, सुहास लाडगे, मनोहर जाणार, संजय कताण, प्रदीप पौडे, दीपक जळके, रचिन पौडके, मोहा वताण, दिनेश चिगडे, मरसेविक मया वताण, रमेश आनंदे, निर्मला वताण, रणज जगताण, विद्या टिळकर, यासिक शिवकर, योगा पौडके, मंगल मध्ये, डॉ. अमिता लघिने संकळ आरोग्य निपजगटामुब मोहन चव्हाण, अनेख शिने आदी उपस्थित होते.

Pune Granthi
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v) VA along with the IBT schools participated in the Shikshan Wari exhibition held at Ratnagiri from 11th to 13th Jan 2018 and at Nashik 29th to 1st Jan 2018. In this exhibition 6 schools displayed their projects made through IBT program.

vi) IBT @ Manchihill school made hydroponics system using UPVC pipes. This system has 10 trays and can produce 10kg green fodder per day. This system was demonstrated in shikshan wari.

vii) IBT Chas school put stall of IBT products in their village from 1st – 3rd Jan. They got good response from villagers.

They did sale of Rs.5100 and earned profit of Rs.1770/-.

viii) Total 48 Students of Narayangaon and Hiwara school visited Gawadewadi school on 3rd and 4th Jan to learn printing of their 3D design. These students made their designs in their school and come to Gawadewadi to print their objects.

ix) Sachin and Prashant visited Cuddalore(Tamilnadu) IBT schools and conducted review meeting- 22nd Jan to 25th Jan 2018. They visited all 3 schools and interacted with school HM, coordinator and students. They have conducted survey to locate community service activities around the schools as part of training of instructors.

x) IBT lectures using video conferencing: soil testing (6th and 13th Jan)- Ranajeet; Welding joints (27th Jan)-Yogesh; Bills and costing (23rd Jan)-Sachin



Hon Education Minister visiting our stall at Shikshan wari



3D printed object by IBT school

GJ IBT Chattisgarh

i) IBT students from 15 portacabin schools of dantewada district and 7 portacabin schools from Bijapur district made 1490kg Bundi Mixture for distribution on the occasion of 26th Jan, republic day celebration. Total value of service is approx. Rs. 1,20,000/-.

ii) IBT students of Matwada made stand for fire sand buckets.



HJ DBRT Updates:

i) Second unit test of DBRT batch was held on 10th and 11th Jan. Students joined their next section from 12th Jan.

ii) A floor mat was fitted on classroom floor.

iii) Electric students had done wiring of 14 electric point connections at various places in ashram.

iv) **Super20** – A new batch started with 13 girls on 1st Jan. They will learn various skills in computer applications and soft skills. We are engaging Six Girls from previous batch to teach 3D drawing in IBT school.



- v) Pooja participated in 'Train the trainer' workshop organised by CIS-India at Mysore from 26 Jan 2018 to 28 Jan 2018. She got training on Wiki data and wiki source.
- vi) Food lab students made bread from 58Kg maida in this month and supplied to kitchen. They also put up stall of food products made by them in Pabal Yatra on 30th Jan and sold product of Rs.1680/-
- vii) One day Ferrocement training was conducted for Sinhgad college of architecture students on 12th Jan.
- viii) Following agri plots are made as part of project by DBRT students.

मेथी (संतोष), फ्लॉवर व पालक(मयूर), वांगी(औंकार), ओट्स(पांडुरंग), मिरची (धनंजय), बरमित गवत (सुरत्या), हत्ती गावात (महेंद्र)

I] DIY workshop: Following workshops were conducted by DIY Lab,Pune. Students were taught simple electronics and making small gadgets.

Netaji Subhashchandra bose high school (4th & 5th Jan - 20 students)- project Air cooler

Savitribai Phule high school (11th & 12th Jan – 20 students) – project Solar based light

Mahatma Phule High school (18th & 19th Jan – 20 students) – project clap switch)

RSM High school (30 & 31st Jan- 17 students)- Project 3D printing and arduino based Smart Samai

Ratnaprabha Devi high school – 5th Jan – 50 students - Gardening workshop



J] Update - Technology development & Design innovation centre:

i) Nine students from Dapoli & Nasik agriculture college joined DIC for 4 months internship. They will work on various projects.

ii) Two days Drying technology training was conducted on 26th - 27th Jan at Pabal and Nhavara. This training was conducted in collaboration with Gramin Tantranyan Santha (Nhavara). Training was attended by 7 participants to learn basics of drying technologies like conventional hot air drying, solar drying, micro-wave drying etc.

iii) New composting drum – Two new composting drums are fabricated for composting trials. Hand rotated composting unit (D-model) is designed by considering need of households composting, while 100 Kg self-rotating drum will be useful for daily 10 Kg loading (5-7 families). Both units are under trial at ashram.

iv) Palnar visit : Ranajeet visited Parnar on 23rd January to meet School HM and district collector. Visit was to finalize lab location and seek other facilities (support) required for starting lab.

v) Team was busy in the month for preparation for DST Experts visit and completion of all reports and documentation. We have made new booklet on technologies and videos on technologies.

vi) Hideo Oguri (Japan) visited VA on 22nd Jan and conducted workshop on making bamboo Charakha.



Mr.Hideo Oguri - Bamboo Charakha Maker from Japan

K] Entrepreneurship Accelerator:

i) We made Business Plan for following businesses:

Fabrication Workshop, Bamboo Furniture and Structures, Falls Ceiling, Plumber services, Goat Farming Business, Door Lamination, Sliding Window

ii) VA technologies are updated on www.vigyanashram.com and www.dsttara.in

L] Other tit-bit :

i) 26th Jan : Republic day was celebrated with enthusiasm. All students, staff and intern did Shramdaan and cleaned marketplace of Pabal village on 25th Jan. They cleaned the place, painted trees, cleaned and repaired unused ladies' toilet. This toilet was constructed last year but unused since there were no



steps constructed and door was at height from ground floor. There were lots on weeds grown around the entrance of toilets. Students removed all weeds, constructed steps for the toilet. Grampanchayat helped us by providing paint and brooms for cleaning. There were lots of appreciation from villagers for the work. From next day, ladies started using the toilets in the market, is most satisfying thing.

ii) Donation to Vigyan Ashram : **1.**

Ammado – Donation, Yogeshee, Mr.Owen

iii) Visitors to Pabal campus – 427 ;

Website visitors : www.dsttara.org – 815 (New-727 , Repeated –88), www.vigyanashram.com – 1432 (New visitor –1152 Repeated-280)

, www.vigyanashram.wordpress.com – 2300 (Visitor- 1689 Viewers-611)

iv) Weather record – Rainfall – 0 mm (Total 882 mm) ,Max temp- 22°C, Min Temp – 14°C , Humidity – 43%, Water height in well – 6 mtr .

v) Energy consumption record- Electricity unit – III Phase- 1451 unit, I Phase- 815 unit. Quality of power: Number of interruptions: 52, Normal voltage: 90.18 % , No supply: 1.61 % , low voltage: 5 % , high voltage : 0%, No data: 3%; Two

wheeler usage : 727 kms

vi) Biogas consumption – Dung used- 132 Kg, Gas produced- 26.1 m³.



Cultural program 26th Jan

Data Report : <https://goo.gl/QQhY6y> **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:



Agri activity @ Hiware IBT school



ILFS Directors visited IBT school @ Shewali



Laser DC @ Maker Mela



DST team @ Climber Engineers : Our Partner in manufacturing of sanitary napkin incinerator



Maintenance of dryer

(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, Fab foundation, Dept of Science & Technology, and many individuals and foundations)