

Vigyan Ashram Status Report

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Remembering founder of Vigyan Ashram Dr.Kalbag on 30th July - Open House Exhibition

A] Open House Exhibition

Vigyan Ashram organized 'Open House Exhibition' on 30th July on the occasion of anniversary of Dr.S.S.Kalbag. All our projects, workshop and activities were on display. Highlights of the event as follows:

- Total 3365 visitors visited ashram including students from 23 schools.
- Our ex-employee Dr.Suresh Pawar was chief guest of the program. He awarded Mr.Ganesh Sawant with 'Yuva Udyojak Puraskar 2015'. Mr.Sugan Barant (Nayee Talim Samittee, Wardha), Dr.Aruna Giri were present on the occasion.
- IBT model school and best projects awards were given on the occasion – Maximum community services (Lokmanya Tilak high school, Chikhalgaon) , Best Project : Dhanajinana Vidyalaya, Khiroda and Nutan Madhyamik Vidyalaya, Amkhel
- Demonstration of 3D printer was main attraction of the exhibition.
- Gawadewadi, Pabal, Shirur, Manchihill



- displayed their projects and sold products made in IBT.
- vi) Newly introduced technologies viz. Incinerator, Rice dehusking machine, hydroponic etc were in display along with other appropriate technologies.
 - vii) This event was covered by many local news paper as – Punyanagary , Samana , Loksatta , Sakal etc. Read news in Loksatta on :

<http://www.loksatta.com/pune-news/science-hermitage-at-pabal-1127011/>

It was on local TV news channel - <http://www.cmnchannel.com/2015/08/06/vidnyan-shramatun-ghadale-udyojak/>



Chikhargaon school won maximum community services award.

B] Welcome to DBRT 2015-16

DBRT batch 2015-16 started on 10th July with 47 students. We have students from various states beside we have admitted three students with special needs. Councilors from Army public school & Dhruv academy agreed to conduct counseling of our staff and rest of the students and sensitize them with special needs of these students.

With the donation from one of our friend from Infosys, we have made safety shoes available to all students and made it compulsory on campus. We have also provided lockers to each student.

We are thankful to M/A Asha for Education, M/S Eton Pvt Ltd, M/S SPA Management systems and many others for supporting DBRT program.



C] 'Guru Sanmaan' Award by Savarkar Prathisthan (Sangli)-

Vigyan ashram received 'Guru Sanmaan' award for its work in education. Every year on the occasions of 'Guru Purnima' Savarkar Prathisthan (Sangli), honors social institutes for their remarkable work in the field of education. The award comprising 'memento' and donation of Rs.10000/- was presented in the

award ceremony. Ranjeet accepted the award on behalf of Vigyan Ashram. Documentary of Vigyan Ashram was shown at the event followed by discussion

D] IBT Updates :-

i] Instructor Training At Dantewada, Chattisgarh : Refresher training of IBT instructors was conducted from 7th – 12th July at Porta cabin school, Gumada. Total 88 instructors from 17 schools participated in the training. Collector of Dantewada district visited training program and encouraged instructors to start their enterprise.

ii] HM meeting at Rayagada : Meeting of principals and senior teachers of 12 schools participating in IBT program was conducted on 10th July at EMRS- Rayagada. Implementation plan and time table for IBT program is finalized during the meeting.



iii] Instructor Training at Koraput (Odisha) :

'IBT Instructor Training Program' was conducted at EMRS, Pungar, Koraput district from 27th July to 31st July. 42 Instructors from 12 schools participated in the training.



E] Night science 2015 at Paris

Yogesh visited Paris from 9th – 11th July at the invitation of CRI (Centre for Interdisciplinary Research). He gave talk on 'Learning through real life situations' at Night science2015 conference at CRI, Paris. This also gives us opportunity to present our educational methodology to international audience.

F] DST core support project-

Following are important updates on technology development:

FAB LAB

- i) 3D printing workshop: Atul Yadav and Pradnya conducted workshop on 3D printing at Makers Lab, Pimpri. Five students learnt 3D printing and printed their first job on 3D printer.
- ii) Fab Academy: Global evaluation of assignments done by our students was done by Fab Academy's Guru. Suhas and Apeksha completed their Fab Academy assignments. Pradnya and Suyog got suggestion and need to rework on their assignments.
- iii) Installation of new Laser cutting machine and electrical issues – We got new laser cutting machine. Its installation is in progress. We are working on resolving the issues with electricity supply. We have provided separate earthing and neutral to meet the machine requirement. Electrical wiring in workshop was also checked and leakages were fixed. Laser machine manufacturer also specified UPS requirement for the machine.
- iv) Installation of Voltage rectifiers with the help of Eaton experts- Eaton technical team visited VA campus on 12th July. They have designed rectifier circuit to cut-off electrical supply as per pre-set minimum : 173V & maximum voltage : 253V values. We have source all the component and unit was installed for workshop and Fab-lab.
- v) WOMA VIVUS Incinerator – We have got incinerator casing made completely on metal laser cutter. A design file was made in Catia software and got it printed from industrial vendor. First unit was successfully tested and put on display on 30th July. Video of incinerator is available on :-



WOMA VIVUS Incinerator

<https://www.youtube.com/watch?v=pj709ecVh4E&feature=youtu.be>

- vi) **High density fish farming (RAS) experiment - New Aquaponics/ RAS trial started from 26th July.** Following are important system details of this trial –
 - Fish Tank – New System has 2 fish tanks - first tank holds fish and in second tank fish waste (tank sludge). Fish tank has fixed a drainage line at its bottom with perforated pipe for taking out fish waste and pump it to bio-bed.

- Water circulation system- Water circulation system consist of water pump fixed in secondary tank, Suction pipe , Disc filter, micro-sprinklers for bio-bed, drippers for vegetable beds in polyhouse, pressure adjusting valves. Fish waste water pumped from secondary tank, it passes through bio-bed and vegetable beds and after filtering return back to fish tank.
- Bio-bed and Vegetable cultivation – Bio-bed of 16.80 M³ consisting bricks, mortar (stone) and sand (Same as earlier trial). Bio-bed is cultivated with Fenugreek (Methi). Fish water is also passed through the vegetable beds, cultivated with various vegetables as tomato, brinjal, cabbage and chilli.



- Fish feed- Fish feed consisting rice bran+ Ground-nut oil cake+ Tapioca (sabudana)+ mineral mixture is formulated by using internet references. Fish are fed with this feed as per their body weight.
- Water quality parameters- Water records are kept Dissolved oxygen (DO) and NH₃ regularly and water circulation timings are adjusted accordingly.

vii] Entrepreneurship Accelerator project

- a) Prakash Nayak & Rajesh Dhayarkar (DBRT 2014-15) joined Entrepreneur fellowship programme. Prakash will be working in the workshop section, whereas Jayesh will work in Agriculture section.
- b) Information broucher is printed for TIED and STED project. It will be useful to communicate with budding entrepreneurs through IBT School and partner organizations.

- c) Rajesh Padavi , visited B-fund's Mumbai office to present his business model. B-fund has sanctioned micro-finance support of Rs.1.10 Lac to Rajesh's bakery unit.

viii] Auto-CAD drawing class

To train our staff in computer aided design, we have started Auto-CAD and Catia training. We have hired external faculty and they will conduct the course on Saturday & Sunday. At present 6 staff members are undergoing training. The CAD designing will help us to adopt new machine tools and practices required in 'digital fabrication'.



Rice Dehusking Machine Despatch

- ix] Rice dehusking machine was supplied to INORA. Training was conducted for their staff on 11th July.

G] DBRT update

- i) As a part of practical, students planted ficus plant in front of bathrooms. These plants will cover toilets.
- ii) All basic practical's has started in all sections. Students were involved in preparation for 30th July program.
- iii) Yogesh attended meeting with business head of M/S Megger Pvt Ltd. at their Mumbai office on 29th July. We have discussed course content on advance course in electrical and electronics.
- iv) Food Lab Sale : 10 kg chikki, 15 kg lemon pickle, 5 kg thin wheat flour biscuits , 5 kg nankatai, 5 kg instant puran mix. Amount of sale : Rs.7884/-



H] Other tit-bits-

- We have conducted interview for the coordinators of 'Entrepreneurship accelerator' on 18th and 25th July.
- Mr. Sanjay Kamble (Janadhar,Latur) and Mr.Vijay Jadhav(Samtol) visited VA on 16th / 17th July to discuss skill training program and for waste management.
- Weather record – rainfall of the month - mm ,Max temp-28°C , Min Temp –18 °C , Humidity –82 % , Water height in well – 4.61 M

- Energy consumption record- Electricity unit – Three Phase - 707 KWH, Single Phase –475 KWH , Quality – No. Of interruption- 170 , No supply -66.28hrs , Normal Voltage -81% , No supply – 8.94% , Low Voltage – 0.28% , High Voltage- 9.62%
- Diesel consumption for generator- 0 Lit , Two wheeler running- 566 Km.
- Dairy record- Income – Rs.13513/- Expenses – Rs.9075/- . Soni and Sonal cow are in operational loss.
- Goat insemination : 31 nos (Rs.2160/-)
- Biogas consumption – Dung used- 1233 Kg, Gas produced- 8.33m³ , Rainfall : 30.8mm

Data Report Link-

<https://drive.google.com/file/d/0B3-4RfsZ2K2OXzNtYy03SUdsNXc/view>

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

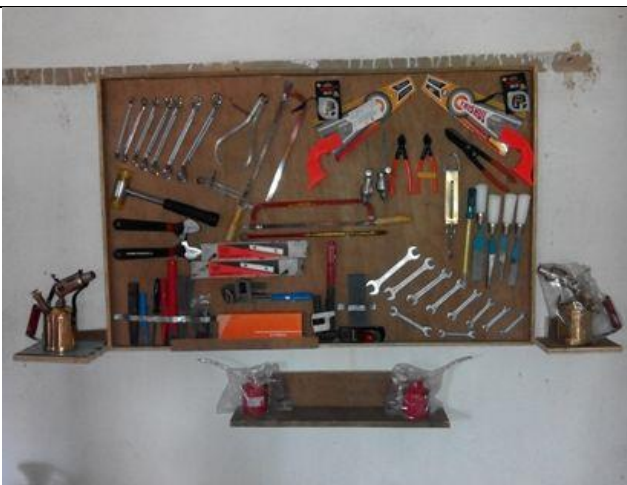
Photo Gallery:



DBRT hostels : New furniture for new batch



Humidity chamber Practical's : IBT Training



Tool set : IBT Korapur- Odisha



Collector , Dantewada visited IBT Training

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