

Vigyan Ashram Status Report

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A] Diploma in Basic Rural Technology (DBRT) graduation:

DBRT 2022-23 batch completed their course on 23rd June. A graduation ceremony was held at Vigyan Ashram on 23rd July. Total 50 students (Out of 52) got their Diploma certificate.

Students got placement in Engineering (14), Electrical (16), Food processing (6) and Agriculture (1) industry.

Ms Bhagyashri Adkar &

Mr.Mandar Pophale (Praj Foundation, Pune), Shri. Ashok Agrawal & Virendra Champanelkar (Pragati Pratishthan, Jahwar) and Mrs.Jamila (Manvya Trust,Pune) were present for graduation function

Following awards were given on the occasion

- DBRT merit : Kshitij Korade (1st) ; Lohar Rushikesh (2nd), Temkar Rutik (3rd)
- Highest community Service award : Rushikesh Lohar (Rs.14,451)
- Student of the Year award : Temkar Rutik
- Best project : Use of dryers for Making resins from grape . dry onion etc.

Combined community service offered by students during the academic year was Rs.2,58,593/-.

Important learning highlights of DBRT 2022-23 were captured in short video

<https://www.youtube.com/watch?v=RyX2k6e-DsQ>.

We are thankful ASHA for Education, Praj

Foundation, Eton India Foundation, SPA Education foundation & many individual donors for supporting DBRT program.



B) Introduction to Basic Technology (IBT) instructor's training program

In the preparation of next academic year, we have conducted instructors training program at Vigyan Ashram in batches. First training program was conducted in the month of May 2023. Following programs were conducted in this month.

i) IBT Training 2nd batch: An instructor training program for 41 instructors from 12 schools was conducted from 1st to 6th June. It was supported by MAHLE Engineering Services India Pvt Ltd. & TATA Technologies. Instructors learnt new skills & technology applications through hands-on activities. New technologies like fabrication of solar dryer, hydroponics farming, making of ready-mix food products, solar panel installation etc were introduced in the training. Sessions on New Education Policy (NEP), preparing for science exhibition, planning and reporting etc. were held to increase the impact of the program.



ii) IBT Training 3rd batch: A senior instructor training program was conducted during 27th to 30th June. Training was attended by 52 instructors from 22 IBT schools. The training was specifically designed for senior & experienced instructors without any external funding support.

New technologies like instant dhokala-mix & millet-based products, making of dishwasher, FRP & door lamination, sliding window fabrication, CCTV installation, solar panel maintenance, mobile applications for farmers etc. were introduced to instructors during the training. (VATF)

iii) Team of officials from M/s Mahle Engineering Services India Pvt Ltd. Ms.Shibi Mathew, Mr.Jakob Ruemmler, Mr.Milind Godbole and Mr.Ashutosh Despande visited Vigyan Ashram on 1st June. They interacted with training participants and also take a review of progress of CSR activities.

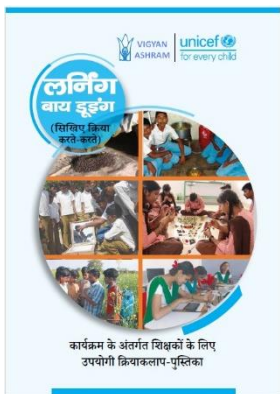


Visit of CSR team from M/s Mahle Engineering

iv) 'Learning by Doing' instructors training :

Training of instructors was conducted during 10th to 13th June at Lucknow. Total 60 instructors from 15 district of Uttar-Pradesh state participated in the training. Instructors learnt activities of farming, food processing, engineering and environment section through hands-on activities. New activity handbook is completed and was used in the training. Dr.Yogesh Kulkarni was the main resource person along with Suyog, Sharad and Prashant. Mr.Ritwik Patra also visited training and interacted with participants for effective implementation of program. Yogesh also visited Samagra Shiksha office and presented them copy of the 'Learning while doing' book. (Stars forum)

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C] 'Learning by Doing' activity handbook

Vigyan ashram along with Stars forum and Unicef has prepared a book for implementing vocational exposure from class VI-VIII. The book was written by team of experts Dr.Yogesh Kulkarni, Mr Ranajeet Shanbag, Mr.Suyog warghade, Mrs Pallavi Shanbag, Mr.Pranav Pujari, Mr.Hrishikesh Kulkarni and others. It is in Hindi language and available in the PDF format. The book includes class-wise and curricular topic-wise hands on activities.

The activities were implemented in 60 schools of U.P in last 1.5 years and now compiled as a book. (stars)

D] Entrepreneurship Development Program (EDP) (VATF):

i) Ranajeet visited Milind Gaikwad @ Pandharpur on 8th June. Milind has started a Kulfi and Ice Cream making unit at his native Padharpur after completing training in May. He wishes to start production during 'wari' (Yatra). So far, he has procured second hand machines and raw material for trial production. We are providing necessary hand-holding support to him under EDP.

ii) Ganesh visited Vaibhav Konde @ Khed shivapur on 12th June. Vaibhav is our DBRT (batch 2006-07) students. He has setup a safety hand-gloves manufacturing unit in Khed shivapur. We want him to mentor DBRT & EDP students.

Hero of the month:

Mr Sumit Sonawane started a 'S S Dog Kennel' a pet grooming enterprise At-Javale Tal-Ambegaon Dist.-Pune. Sumit is our DBRT (2019-20) batch student.

Mr. Suyog Jadhav started an electrical appliance & motor rewinding enterprise with name of "Suyog Electricals and Motor Rewinding" at Dhamani village (Ambegaon, Pune). Suyog is getting skill training, technical mentoring support in EDP program. He has invested Rs.2 lacs for new enterprise.



Kulfi making unit of Milind Gaikwad



PET CARE Services

SS Dog Kennel

- Pet Supplies
- Pet Food and Nutrition
- Pet Breeding Services
- Veterinary Care
- Training and Behavior
- Pet Boarding and Daycare

At- Post Nirgudsar Tel-Ambegaon Dist. Pune

Contact us: 📞 +91 9834569250



Simit Sonwane (DBRT 2019-20)

Suyog Electricals and Motor Rewinding

E] Fab Academy Update:

Fab-academy 2023 course was concluded on 28th June. We had two students Sanjay & Pushkar. They had presented their final project on 9th June. As a part of their project Sanjay successfully built prototype of 'liquid consistency (viscosity) measuring meter'. Pushkar made a 'smart backpack', it has smart suspension and reduces dynamic load of the bag. Documentation of the project is available on their blog.

Liquid consistency measurement: <https://fabacademy.org/2023/labs/vigyanashram/students/sanjay-surage/project.html>

smart backpack system: <https://fabacademy.org/2023/labs/vigyanashram/students/pushkar-suryawanshi/final-project.html>

They will receive fab-academy certificate after completion global evaluation process in Fab23 conference in Bhutan.

F] Design Innovation Centre (DIC) & Technology development update:

i) A Black Soldier Fly (BSF) based composting system is installed at Darpan Housing Society, Rajgurunagar. The system is installed on the invitation of Dr.Mrs.Manik Bichakar and Mr. Shrikant Lalge (CEO, Rajgurunagar Nagar Parishad). A special horizontal hanging basket is designed for processing waste in car-parking area of housing society.

In the month of June, total of 390 kg waste was processed in the society by using 4.8 kg (5 day old) larvae. (VATF)



BSF hanging bags in society

ii) Dr.Arun, Sumit and Kartik visited Sawant Automobile (Alandi) for repairing E-Rikshaw batteries. Both E-Rikshaw are of 'kinetic' make and not working from past 6 months due to battery & other breakdowns issues. We have been following up with kinetic & battery manufacturer (okaya) but did not get any service support. Now we have decided that DIC students will work on battery issues like cell-balancing, Battery Management System (BMS) & controller system through local vendors.



Polyhouse Fan Pad system under construction

- v) Mahesh & Prasad completed CAD drawing, dome fabrication and plastic cover lining work for 50 kg loading capacity 'solar dome dryer'. The drying tray will be made up of laser cut aluminum sheets.
- vi) Ranajeet and Dr Pooja Doshi of SPPU visited New Delhi on 5th June and presented proposal to DST Executive committee under SUNIL program.

vi) IIT-Bombay student Afsal Najeeb, Mickel, Omkar Bua fabricated 'water-wheel' as a part of 'Living Lab' project from 20th – 30th June. The 'water-wheel' is made as a pilot for hydroelectric turbine for Villages in Jammu & Kashmir by Aseem Foundation.

vii) New Intern's @ Vigyan Ashram : Following interns joined Vigyan Ashram for two months internship.

- Vanshita Patel (Integrated Masters of Design, Karnavati University, Gujarat)
- Prathmesh Thakere, Pritesh Pawar, Parth Hanvate (BE Mech, SSGM College of Engineering, Shegaon)
- Uttara Paithe and Kartik Shingade (Living lab, IIT-Bombay)



G] DBRT student learning updates :

DBRT 2022-23 student's final examination was conducted from 19th to 21st June. Final assessment was done based on written, practical examination & project document submission. Each students maintained their blog. Details on their learning experience can be found on <https://alumni.vigyanashram.blog/dbrt-batch-22-23/> Other highlighted learning activities for June months are as follow-

Electrical section: Team of 5 DBRT students completed electrical wiring work for new hostel building. Total cost of their work was Rs. 58511.00 including labor charges of Rs.6500.00. Students also fixed new panel box in the polyhouse.

Workshop section: Hrutik and Laxman fabricated a safety door for hostel building. They earned community service of Rs.1121.00 for total cost of Rs.7289.00. Team of Vaibhav, Abhishek, Tarun completed sliding window fixation work for hostel. Total cost of the work was Rs.77539.00 including labor charges.

Agriculture section: With the on-set of monsoon season, agricultural plot ploughing work was started in June. Due to delayed monsoon, sowing was delayed but student learnt basic land preparation operations like ploughing, harrowing etc. Students also harvested 5 kg of groundnut and 3 kg brinjal from vegetable plot. In poultry farm 7 birds died due to dysentery.

Home & health section: During June, students processed 28 kg bread flour in bakery, completed kitchen order of 15.66 kg spices, Tamarind sauce (4 kg). Total sales of for June was Rs.2940.00. Girls also provided tea & snacks facility during IBT training with community service value of Rs.10475/-.

Students stitched cover for CNC wood routing machine.



Sewing cover for big CNC machine

H] IBT updates:

IBT schools started after summer vacations. Following are some of the students learning activities in school:

- Students of SDMNP gurukul, Chikhali school prepared 1000+ forest tree nursery in school campus. They used milk-bag and vermi-compost prepared on the campus for these seedlings.
- IBT students of engineering section at Bori school, learnt basic of plumbing skills while installing 120 ft PVC pipe line in school premises. Students learnt PVC pipe fixtures & joints, joining protocol, soil digging etc skills while earning community service of Rs.3000/-.
- 8 IBT schools in Maval block (Pune) fabricated rain-gauge for recording daily rainfall in school premises.
- IBT students from 4 schools (Tung, Nigade, Shivane, Sangise) in Maval block collected 450 soil samples from local farmers for soil analysis. In this month, students completed analysis of 39 soil samples. By end of July, they have planned to analyses all collected samples for 6 parameters. (Stars)



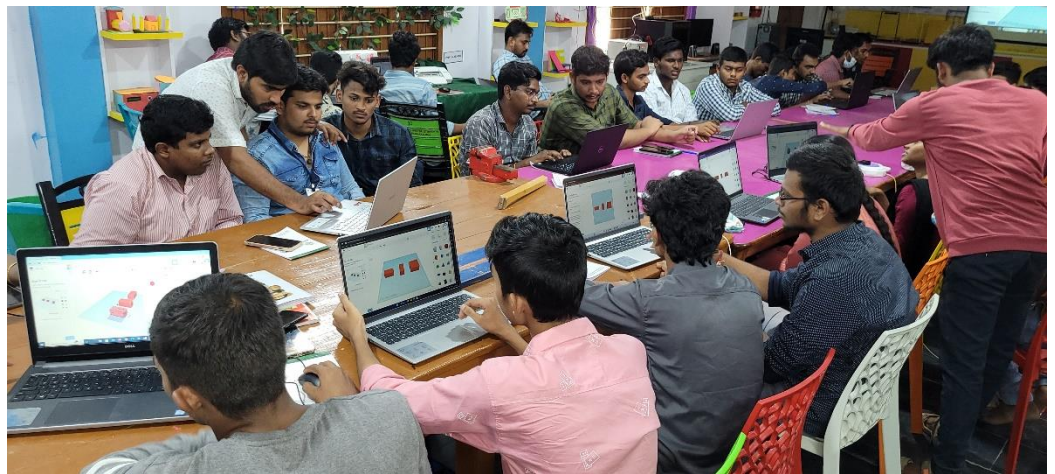
Soil testing @ Nigade School

- Mahendra & suyog visited Khadaki (Pimplegaon, Tal-Ambegaon) school for on-site survey. The schools have shown interest in starting Introduction to Basic Technology (IBT) program with financial support of TATA Technologies CSR support. (Stars)

I] Atal-Tinkering-Lab (ATL) & DIY lab update:

ATL Andra-Pradesh:

- It is planned to engage Engineering college students in mentoring of ATL school students. A training for engineering college students from Jawaharlal Nehru Technical University, (JNTU) Kakinada was organized at ATL hub lab, Penamaluru during 6th to 8th June. The training was a part of Board of Development through community education (BDCE)'s program of state higher education department.



- Summer camp was conducted at 2 ATL labs (ZPHS Vapagunta and ZPHS Ippili) during 2nd to 6th June. During May & June month total 7 summer camps were conducted in different schools to create awareness hand-on learning activities.

ATL Telangana:

- A summer camp was conducted at ZPHS, Kamanghat during 7th to 10th June. It was 4th summer camp in the series aimed at creating awareness & tinkering culture in the high school.
- On 21st June, Mr.Mussa (Senior Policy Director, Educational Dept Maldives) visited ATL Karmanghat, Hyderabad to know functioning of lab & students learning activities.

ATL Karnataka:

- Students learning activities started in ATL hub lab Nasarapura (Dist-Kolar) after summer holiday.



Summer camp @ Karmanghat

Do-It-Yourself (DIY)

Total 5 activities were conducted with membership students

- i) Design your own air powered car (3rd to 7th June) - Designing air powered car in Tinkercad and 3D print to learn the Newton's law of motions (<https://youtu.be/u7CnGcUB8co>)
- ii) Learning mechanisms of different bots (14th to 17th June) - Designing and building various bots while learning different mechanisms (https://youtu.be/_zMh7RbMMY)
- iii) Making grabber for robotics (21st to 28th June) - Learning mechanisms (<https://youtu.be/hCW4QEFelT8>)
- iv) Learning through sting art v) 2D & 3D design & printing.



JJ Distance Learning Library (DLL)

- Prasad and Bhakti Talwalkar visited Mogora Cosmic Pvt Ltd, Bhosari (Pune) on 3rd & 4th June for TIG & MIG welding video-shooting. The module will be developed with the technical support of Tech-Wisdom Forum (Pune).
- Vanshita and Prasad completed video-shooting and editing of 1st module of 'water pump' installation module. They also tried AI based voice-over technology for first draft of video. (Stars)

K] Other tit-bits:

- i. Ranajeet & Bhakti participated in “Argo-Entrepreneurship Development in Natural Farming: Possibilities, Challenges and Way Forward” workshop organized at Chinmaya Organization for Rural Development (CORD), Sidhabari, Dharamshala (Himachal Pradesh). Two-day workshop was jointly organized on 24th & 25th by CORD and Vishwa Yuvak Kendra in association with the STARS Forum. Ranajeet presented soil organic carbon enhancement & composting technology developed by Vigyan Ashram in his talk on ‘Importance of soil in natural farming’. They also visited ‘Hatras’ village near dharmshala to meet ‘kitchen garden development’ course beneficiaries & Women Self-Help Group (WSHG) members. During pandemic WSHG members attended online-course on ‘kitchen garden’ development conducted by Vigyan ashram.
- ii. On 22nd June, staff of Women Empowerment Department of Dr. Babasaheb Ambedkar Vaidyakiya Pratisthan, Sambhajinagar visited Vigyan Ashram to study our program of livelihood promotion especially among women SHGS.
- iii. Annual review meeting of Educational programs of Vigyan Ashram was conducted on 4th & 5th June. We have discussed factors contributed in successes and things that does not worked out in the previous academic year. We have made section wise plan for implementation next year. Issues related to infrastructure maintenance, student-staff rules & regulations etc were discussed & decision were taken.
- iv. Vishal, Reshma and Yogesh Onkar visited organisations in Nasik, Jawhar, konkan, Melghat and Marathwada during 8th to 10th and 13th to 15th June for promotion of DBRT & EDP skill training programs. The effort is necessary to reach to deserving candidates and inform them about courses available at Vigyan Ashram.
- v. Prasad Patil was speaker at career guidance workshop at VVM high school, Karandi on 16th June for students of class X and XII. The program was organized by Rotary Club (Pune).



DBRT Promotion campaign

- vi. Internal partition work completed for 'plant tissue culture lab'. Work is done as a part of lab upgradation project under support of SPA foundation.
- vii. Dr Yogesh gave a talk at 'Unnat Bharat Abhiyan' workshop held at Vishwakarma University on 22nd June. It was organised by IIT Mumbai and Yojak.
- viii. Rajiv Gandhi Science and technology commission and HBCSE, Mumbai organised workshop for management representative of selected educational institutes on formulating proposal for science and activity center. Participants visited Vigyan Ashram on 23rd June and interacted with Dr. Yogesh Kulkarni.
- ix. Dr. Yogesh Kulkarni participated in the Seed the future competition grand finale as a Jury on 24th June.
- x. Weather record – Rainfall of the month – 44.65 mm (Total: 44.65 mm), Max temp-38.00°C, Min Temp – 22.00°C, Humidity – 61 %, Water height in well– 3.25 M.
- xi. Energy consumption record- Electricity unit – III Phase- 888 unit, I Phase import-76, Solar generation- 1974. DG used – 5.10 Hrs.
- xii. Animal Husbandry section update – Milk production – 705 Kg (Gross profit- Rs.8741.00).
- xiii. Biogas produced-59.00 M³ (Dung used- 1177.0 Kg)
- xiv. Online visitors: www.dsttara.org – 926 (New visitor- 837, Repeated-89), www.vigyanashram.com – 1288 (New visitor-1048 Repeated-240). Campus tour visitors – 120.



4th June : Rotary club of Pune Heritage Vocational Excellence Award to Dr. Yogesh Kulkarni

KJ Data Report : <https://tinyurl.com/mr3tc5c5>

(Work of VA is supported by Asha for Education, Praj foundation, EATON Foundation, LTI-Mindtree, SPA Education Foundation, UNICEF, TATA Technologies Pvt Ltd, Mahle Engineering Services Pvt Ltd, Schaeffler India, INDUSIA Endowment, Savitribai Phule Pune University, Dept of Science & Technology, La-foundation, Prabhu trust and many individuals and foundations)

Photo Gallery:



Fab Academy project



TIG & MIG Welding video shoot

For Regular update: www.facebook.com/vigyan.ashram.pabal ; www.vigyanashram.blog
www.vigyanashram.com ; <https://vigyanashram.online/>