

Vigyan Ashram Status Report

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- 'Kaushal Bodh'- Teachers training program for Schools implementing Vocational education
- Workshop for food entrepreneurs (TAP-RISE project)
- Amboli IBT school won First runner up prize @ Made in 3D- Seed The Future Entrepreneur (STFE) competition
- Seven passing out students started their business on graduation day

A] 'Kaushal Bodh'- Teachers training Program

In preparation for the coming academic year 2026-27, we have organised four training program for training of teachers implementing Vocational Education in school. Total 232 teachers and instructors participated in the training at Pabal campus. CBSE board has started implementing Koushal bodh from last year. Maharashtra state board has decided to start its implementation from this academic year from Grade 6.

The training covered project-based learning, NCERT curriculum, annual planning, assessment, documentation, reporting, and implementation.

Sr. No.	Date	Participant
1	03 rd – 06 th June 2026	56
2	17 th – 20 th June 2026	57
3	22 nd – 25 th June 2026	51
4	30 th June – 03 rd July 2026	67
Total		232





B) Training workshop & webinar under TAPRISE project

- A two-day training workshop for entrepreneurs in the food-processing sector was held at J P Naik Centre of Education, Pune on 13th and 14th June under the TAP-RISE program. 13 food entrepreneurs attended the workshop. The program was focused on practical strategies for scaling food-processing businesses, covering selection of appropriate packaging materials, marketing and branding, distribution-channel management, online marketing platforms, and licensing requirements. Participants engaged in interactive sessions with subject-matter experts from the food industry and learned through case studies, hands-on activities, and group presentations.
- As part of technology dissemination webinar series, Dr. Lal Sing from the Himalayan Research Group (HRG) presented Chirata (*Swertia chirata*) processing technology on 25th June. Chirata is a medicinal plant used in many Ayurvedic medicines.



C) IBT schools' Success at "Made in 3D-Seed the Future Entrepreneur (STFE)"

This is the third consecutive year, IBT schools mentored by Vigyan Ashram demonstrated outstanding performance in the national students' innovation and entrepreneurship competition. The Made in 3D – STFE 2025–26 Grand Finale was held on 27th June in Pune. Two schools mentored by Vigyan Ashram were in the 10 finalists selected from 210 schools across India. This is a year-long competition organized by La Fondation Dassault Systèmes in India in collaboration with Atal Innovation Mission (AIM), NITI Aayog, and Michelin India Pvt. Ltd. Hon. Vitthalrao Patvardhan Utkarsh Ashramshala, Waghera, was awarded First Runner-Up for "Bamboo Easy Fix". Award comprises of **a School Trophy, a 3D Printer, electronic gadgets worth Rs. 5,000/-** and Adarsh Vidyalay, Amboli, won the Category Award for "Most Relevant to Theme" for "Mahua Peelease." Awarded comprises of a **School Trophy**

and electronic gadgets worth Rs. 5,000/- along with Special Category Award certificates for each team member.

We extend our sincere thanks to our CSR partners — TATA Technologies, Schaeffler India Foundation, and MAHLE Engineering Service India Ltd. — for their continued support and encouragement in implementing school vocational education programs.



D] Welcome DBRT-2026-27 batch students

- The Diploma in Basic Rural Technology (DBRT) 2026–27 course has commenced last month (May). Twenty (20) new students joined DBRT course this month. DBRT is a one-year residential multi-skilling programme based on a “learning-while-doing” philosophy. Till date, 58 students from tribal & remote areas of Maharashtra, Karnataka & Gujrat state took admission for the course.

Seven passing out students started their business on graduation day

- The DBRT 2025–26 graduation ceremony was held on 22nd June at Pabal campus. Out of 44 enrolled students, 35 successfully completed the programme; the remaining students opted for short-term certification. Dnyaneshwar Mule secured first rank for academic performance, and Pavankumar Walekar received “Best Community Service” award with a cash prize of Rs.23,120/-. The cumulative value of ‘community service’ contributed by students amounted to Rs. 3,08,248/- this year. Seven students purchased tools to start their enterprise on the graduation day. We wish them all the Best! All other graduated student received paid internship placements in welding and fabrication, electrical fittings, and food processing, while seven students launched their own enterprises.



Students Training activity updates:

Agriculture & Animal-husbandry section:

On set of monsoon, farming activities have geared up; DBRT students learnt soil preparation, fertilizer basal dosing and planation while planting 450 capsicum plants in polyhouse. Students also prepared 1000 plants of cucumber. *Adulsa* and ornamental plants with air-layering and seedling tray technique. In animal husbandry section students worked in the goat farm for learning goat weight estimation and feed calculation.



Energy & Environment section: The electrical section students learnt basic safety practices in energy & environmental section. They learnt use of basic hand-tools and equipment commonly used in basic electrical work. As a regular campus maintenance work, students done maintenance of lead-acid battery, installed new water-filter for DIC hostel, serviced mixture-grinder of food processing unit and fixed new tube-lights for classroom & ladies hostel premises.

Total value of their community service was Rs. 12,160/- (students earning of Rs. 4,350/-).

Engineering section: In this section, students learn & practiced measurement & safety skills while working on metal fabrication, powder-coating and masonry assignments. As a part of learning activity, they constructed brick-wall for goat farming unit and medicinal garden area. Students also completed wall-painting work for new-guest room & boys hostel. Total value of their community service was Rs. 5,200/- for the month of June.



Home & Health section: Students learnt solar drying and ready-mixes manufacturing in Home & Health section while processing 40 kg jack-fruit seeds (28.37 kg powder), garlic powder (2 kg), Onion powder & flex (3 kg), Moringa powder (4 kg) fermented wheat-powder (2 kg) and Pooran-ready mix (2.8 kg). Students also provided refreshment

service during teachers training while learning a community service of Rs.55,394/-.

Individual students' learnings can be found on their blogs:

<https://alumni.vigyanashram.blog/category/batches/2025-26/>

E] Entrepreneurship Development Program (EDP) update (VATF):

Training workshops:

An entrepreneurship orientation training for women's self-help groups (WSHGs) associated with RAAH Foundation (Nashik) was conducted at Pabal campus from 14th to 16th June. 33 participants from tribal WSHGs of Kokankheda and Daregaon (Chandwad block, Nashik) attended the training. They received hands-on training in tamarind and onion processing, spice manufacturing, and vermicomposting. Subject experts from Vigyan Ashram, food industry, Onion & Garlic Research Centre (Rajgurunagar), and a progressive organic farmer from Pabal delivered the sessions. In addition to product-making skills, participants learned cost calculations, packaging and labelling, and marketing strategies, and visited a successful entrepreneur in Pabal village. EDP department will provide on-field hand-holding and incubation support to the participants in collaboration with RAAH foundation.



Field visits, exhibitions & enterprise registration support:

- Mr. Yogesh Onkar conducted a session on "Sensitivity and Learner-Centered Teaching Practices" at the Faculty Training Program on Employability Skills, organized by the Tribal Development Department (Govt. of Maharashtra) with Shabari Tribal Finance & Development Corporation, UNDP, and the Wadhwani Foundation. It was conducted on 18th June.
- Vigyan Ashram participated in the exhibition conducted by Persistent India at their Nal Stop, Pune branch on 30th June. They sold food items including Instant Puran, Onion powder, Garlic Powder, mango jam etc. of Rs. 6,000/-.



- A new enterprise registration supported provided to 1 enterprise with registration of Udyam Adhhar and FSSAI license.

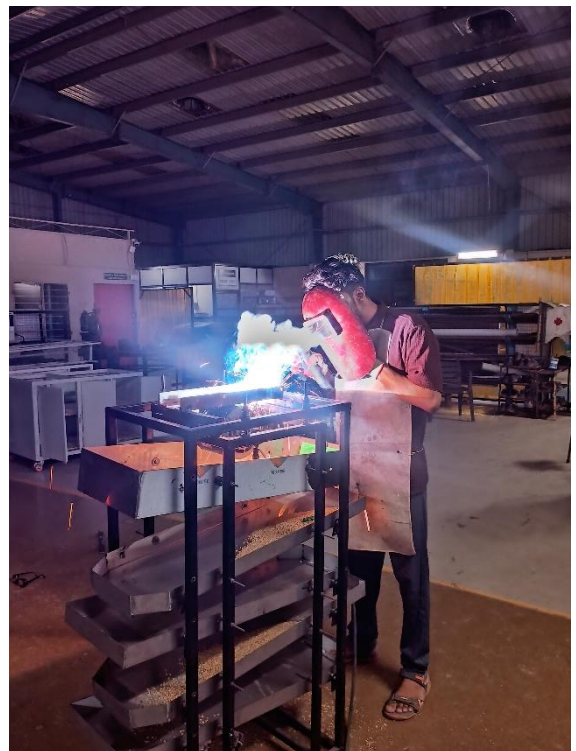
Hero of the month: Mr. Tushar, an alumnus of the DBRT 2024–25 batch, has started a metal-fabrication enterprise in Peth-Pargaon (Taluka Ambegaon, Pune). He made an initial investment of Rs. 1.5 lakh, his enterprise currently generates a gross monthly income of Rs. 20,000/- to 25,000/-.

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

Black-Soldier-Fly (BSF) & Backyard poultry farming: Mahesh processed about 30.3 tons of wet waste at Rajgurunagar Municipal Corporation & Sawardari village. Total 1,130 g of BSF eggs were collected from the breeding chamber to support ongoing production and scaling. (VATF)

Following are some of the research project updates-

- **Breeding larvae feeding trial:** For standardization of breeding larvae feeding rate, Nachiket & Arhana started trial on 20 kg feed mix (10 trays × 2 kg/tray) containing grains (25%), bran (25%), vegetable waste (15%), poultry droppings (12%), chicken waste (11%), Azolla (10%), and eggshell powder (2%). He is monitoring growth, consumption, temperature, moisture, and hygiene were regularly monitored.
- **Breeding chamber automatic shutter:** Tahir completed work of BSF breeding chamber automatic shutter. Shutter operates on light intensity sensor. He is testing 90 W single-phase motor (1440 RPM) with a 60 RPM gearbox that was mounted on the unit roof and linked to the drive mechanism. The light intensity sensor controls motor drive for auto on-off.
- **A 3-day Black Soldier Fly (BSF) training** was conducted for Mr. Vikramjeet Kanwar from Haryana. Training includes technical instruction with hands-on practical sessions. He also visited project site to observe the complete waste-management system and BSF-based processing operations.



Vibro-Thermal-Disinfector for store grain: To address high grain flow rates in the VTD disinfecting tray, Aditya designed a conical hopper to target a feed rate of 550–600 g/min and modified the tray assembly by adding end stoppers, zig-zag flow baffles, and reducing tray inclination. Early trials still showed higher-than-expected flow, so he redesigned the vibrating mechanism by mounting the trays on a vibrating inner

frame supported by four compression springs, which improved vibration transmission and grain agitation. After these changes the maximum retention time reached 3.40 minutes, short of the 7–8-minute requirement; he is further adjusting tray slope, reducing feeder rate, and lowering grain speed to increase retention. (VATF)

Forced air onion storage: Team completed a 2-months lab trial for the 1-metric-ton forced-air onion storage project. The team compared gas buildup (CO_2 , H_2S) and storage losses against a natural-ventilation control. Results show that forced ventilation reduced $\text{CO}_2/\text{H}_2\text{S}$ accumulation and improved quality outcomes. Usable onions increased from 698 kg to 760 kg; rotten onions fell from 144.85 kg (15.90%) to 71.54 kg (7.99%); flake formation decreased from 4.7 kg (0.52%) to 2.5 kg (0.28%); and total weight loss was slightly lower with forced air (60.96 kg, 6.81%) versus natural ventilation (63.45 kg, 6.96%). Based on this data, team is planning installation of air-circulation fans for field trial (6 units installed at Kendur & Dhamari village).



Other highlighted technology development work:

- Ayush while working on the prototype of bamboo hanger found that pre-treatment of warm-water helped in reducing spring-back while improving product quality. He is still facing issues of material failures (cracking) near nail locations during bending. He has completed CAD revisions, process evaluation, and failure analysis and is working on improving it in next prototype.
- Ashwini commissioned and validated the biomass gasifier and prepared an SOP for safe operation. She conducted trial with around 25 kg of dry wood (<10% moisture). It was processed as fuel in which 5 kg oil-coated wood served as ignition material in the absence of charcoal. After cleaning and layered loading, gasification started following blower and air-valve optimization, with producer gas igniting after ~30 minutes; a stable flame enabled a successful cooking test (roasted rava). It was concluded that low-moisture feedstock (7 to 8 % moisture) and precise airflow control improve stability of gasifier.
- In Plant Tissue Culture (PTC) lab, Sayali conducted trial for Moringa (*Moringa oleifera*) in-vitro propagation. She found increased concentration of ammonium nitrate (NH_4NO_3) from 1710 mg/L to 1790 mg/L that helped in healthier green shoot initiation, more multiple shoots, and more vigorous shoot development than the previous trial (16/8 light/dark photoperiod).
- In fab-lab, Riya worked on Image Recognition (IR) project to developed trial model of an image dataset for an automated plant identification system covering 20 species, with ~250–300 images per species captured under varied conditions to enhance robustness.



Moringa Tissue culture

- In the chemistry lab, Jyotsna completed analysis of 29 Soil Samples & 4 water samples (H₂S tests). She also worked on standardized Soil Calcium Carbonate (CaCO₃) or Lime analysis by using Rapid Acid Neutralization Method.

Details of individual projects & intern-student work can be found - <https://vadic.vigyanashram.blog/>

Savardari Village Development Project (VATF)

- On the occasion of '5th June World Environment Day' an awareness program on plastic waste collection & recycling was conducted at Savardari village. Sarpanch Mr. Sandeep Pawar opened the program, highlighting plastic's harms and the local waste-management work by Vigyan Ashram and Pratheen Eco Solutions LLP. Mr. Yogesh Onkar discussed plastic pollution and recommended eco-friendly alternatives like cloth/paper bags and reusable containers. On this occasion we distributed cloth bags at the event and door-to-door, educating villagers about avoiding single-use plastics.
- The construction work for a plastic waste processing unit (a tin roof shade 1200 Sqft) and office space (450 Sqft) area has been started. This shade will be used for plastic shredding, pelleting machines, sanitary pad incinerator installations.
- Construction of 10 Black Soldier Fly processing beds (10 ft × 13 ft each) has been started. The beds will be used for rearing BSF larvae for wet-waste processing.



G] School based vocational program updates (Stars):

RICVE: Research and Innovation Center in Vocational Education project (RICVE) is gearing up now. We are implementing Vocational education program in 20 schools each from Nandurbar and Dantewada districts. In the month of June, we have identified schools and started recruiting program staff. We are in the process of conducting their training in the month of July.

Introduction to Basic Technology:

We are developing an app 'Koushal Vikas' to document students portfolio for their assessment. IBT coordinators were given training on use of App on 15th June at Pune office. Jana Parbodhini is developing the app and Vigyan Ashram is knowledge partner for the same. Coordinators suggested a few improvement in the app. Jana Prabodhinin will work on it.

Learning By Doing (LBD) (Uttar-Pradesh):

UNICEF has given work order to VATF for Developing, rolling out, monitoring and supporting



Koushal Vikas app training

capacity building on STEM (Science, Technology, Engineering and Mathematics) education in Uttar Pradesh. The program includes technical support for training of DIET master trainers and training of teachers in ATL in UP.

Dr. Yogesh visited Lucknow on 23rd & 24th June for project inception meeting with UNICEF.

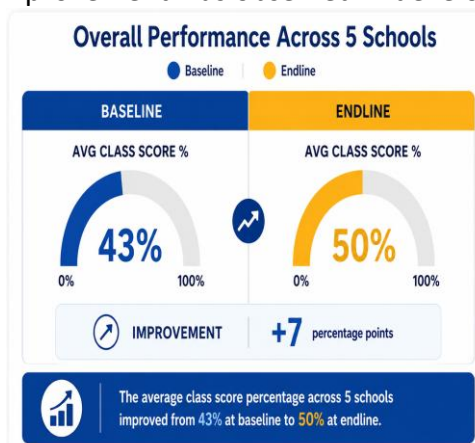
STEM learning at West Bengal: Refreshers teachers training was conducted at Berhampore from 28th to 30th June. A total 102 teachers from 51 schools participated in the training. The sessions focused on strengthening teachers' understanding of STEM pedagogy and hands-on classroom implementation. Dr. Yogesh Kulkarni along with Master trainers trained by Vigyan Ashram from Govt School were resource person for conducting training.



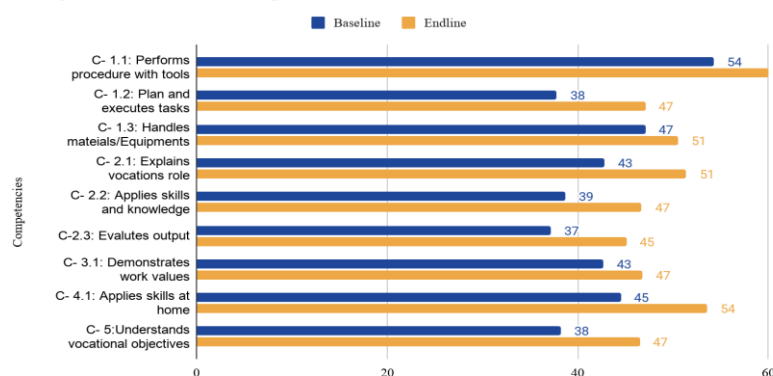
STEM activity in Murshidabad school

Assessment of implementation of VE

In 2025-26, we have done pilot assessment of 5 schools with external agency Syllable. They had done baseline and endline of implementation of Koushal Bodh in last academic year. They have submitted their report this month. Overall, 7%-point improvement was observed in development of competencies in students.



Competencies: Percentage Marks



HJ FAB lab & DIY lab update:

Fab Lab and academy:

Arati Bhosale and Ashish Shende successfully completed and presented their final projects to the fab foundation and fab community in the month of June 2026. All their assignments were evaluated by global evaluator, and they qualify for graduating fab academy in this cycle. They will graduate in Fab conference in Boston, USA.

DIY Lab: We have conducted following activities during the month of June:

- Solar cooker- Level 2 students designed and made the solar cooker from cardboard and reflective sheet. They cooked rice and baked cake in the cooker.
- ML based games and animation- Used block-based programming for developing the game through machine learning.
- Level-1 students made potato wafers to learn more about starch, sun-drying process and the calculating cost of making wafers at home.



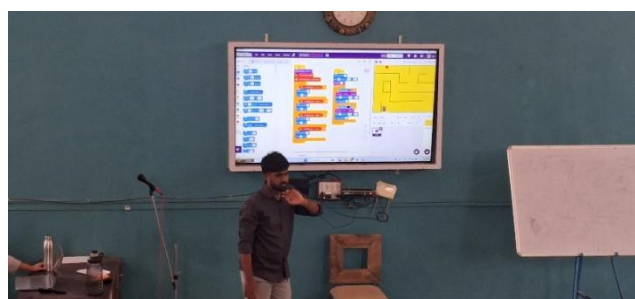
Games and Animation

ATL Updates

Two residential trainings for the ATL in-charge teachers from KREIS (Karnataka Residential Education Institutions Society) were conducted at Pabal. The training covered paper circuits, advanced electronic circuits using transistors and LDRs, Arduino-based home automation using relays and sensors, and a Machine Learning hand gesture-controlled game developed using PictoBlox.

1st batch: 25 participants: 8th to 10th June

2nd batch: 24 participants: 11th to 13th June



I] Other titbits:

- A new automated weather monitoring unit was installed at Pabal campus. It has main console & on-field monitoring system with sensors & mobile app for temperature, humidity, Vapour Pressure Differential (VPD), Photosynthetically Active Radiation (PAR), Wind Speed, Wind Direction, Co2 sensor, Pyranometer Radiation Sensor monitoring facility. We are very thankful to SunSeed APV and Communifi Technologies LLP for financial support & installation.
- A Student from MIT, USA Ms. Tana Mahajan joined Vigyan Ashram as an intern. She is working on development of baseline tool for Vocational education in schools.
- Dr. Yogesh attended Text book Development committee meeting for Grade 11 and 12th books on Vocational education at NSTI, Bangaluru on 11th -13th June.

- iv. **Mr. Prakash Bhagwati, Trustee of Shri Hiralal Bhagwati Charitable Trust**, wrote article on Vigyan Ashram which has been published in the **June 2026 issue of Vishwavihar**, the magazine of Gujarat Vishwakosh.
- v. Dr. Yogesh Kulkarni conducted session on Koushal Bodh implementation on 16th and 17th June. It was organised by PSSCIVE, Bhopal for 80+ resource persons from Vidyabharati schools across country.
- vi. Dr. Yogesh visited Ladhuram Toshniwal Sarada Vidya Mandir, Cossimbazar, Beharapmore (West Bengal) on 1st July during his visit to West Bengal. He conducted session on Koushal bodh.
- vii. Weather record – Rainfall of the month – 27.44 mm (Total: 27.44 mm), Max temp-38.00°C, Min Temp –22.00°C, Humidity –58 %, Water height in well– 2.60 m, Waste-water COD – Girl's hostel – 156 ppm, Boys hostel – 212ppm (within limit)
- viii. Energy consumption record- Electricity unit (import) – III Phase-2641 units, I Phase-651 units, solar generation III Phase – 1528 units & I Phase- 814 units, Solar generation (off-grid)-35 units, DG used – 1.30 Hrs, Biogas- 32 m3 (640 kg dung used).
- ix. Animal Husbandry section update – Milk production –448 Kg (loss of Rs:76.00).
- x. Online visitors: www.vigyanashram.com –2134 (Organic-1445, Other-689), Pabal campus visitors: 106.



Dr. Yogesh conducting session at PSSCIVE

JJ Data Report: <https://shorturl.at/Tm3Uc>

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Photo Gallery:



KREIS training at pabal



Solar Cooker experiment I at DIY lab Pune



Nandurbar school visit



Teachers training at Murshidabad



DBRT Students felicitation



DBRT students graduation

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