

Best Practices and Institutional Distinctiveness: AY 2019-20

Best Practices – I

1. Title of the Practice

Social Upliftment Through Community Services

Objectives:

- i. To help the needy and underprivileged in our society.
- ii. To keep our institute neat and clean under Swachh Bharat Abhiyan.
- iii. To spread the importance of education in society.
- iv. To raise voice against injustice done to the girl child.

2. The Context

Contextual features and challenges faced

- i. This Institute is situated in a tribal region of Palghar district where most people are living below the poverty line. This has motivated various types of donations to help the same.
- ii. Innovative minds can emerge from healthy bodies and these dwell in a clean atmosphere this sensitized a nationwide campaign “Swachh Bharat Abhiyan”.
- iii. Literacy rate is quite low in the tribal region of Palghar district where this Institute is situated and that is the cause which has stimulated the teaching campaigns. One of the hurdles to this campaign is the mindset of people towards education.
- iv. In the rural areas, the girl child is considered as a curse. People eradicate her before she comes into this world. This practice will diminish the generations to come. Wrong beliefs in the society have motivated us to conduct awareness programs.

3. The Practice

Our Institute follows a unique practice of paying gratitude and handling responsibilities towards the society through the NSS and UDAAN committee. Apart from technical growth, important program outcomes of any technical education are to inculcate rich ethical values and basic social awareness, and our NSS and UDAAN committee targets towards achieving these goals.

- i. Guidance is key to success. Students who wish to aspire for higher studies were enlightened by a seminar on “How to prepare for GATE exams”.

- ii. Motivating the younger generations and focus them on human values and ethics is also necessary. To accomplish the same the Committee organized the screening of the Movie “Uri- The Surgical Strike “for our students.
- iii. Filth on the beaches deteriorates the coastal and ocean ecosystem. To keep this environment free of germs and other microbes, a beach cleaning drive was undertaken by our Committee.
- iv. To balance Mother Earth’s ecosystem one of most important factor are trees. Deprived of fresh air, oxygen, rainfall, and deforestation motivated the tree plantation drive.
- v. Keeping oneself fit is quite crucial along with our diligent schedule. Committee organized a fit India movement to strike a balance between the two
- vi. “Swachh Bharat Abhiyan” the cleanliness awareness program was conducted. NSS and UDAAN team actively participated in this drive. Not only our college campus but also Vasai road railway station was also cleaned. Rally was organized to create awareness of Gandhiji ‘s thoughts.
- vii. Energy conservation is the true solution to global warming hence one day Workshop was organized to educate on building solar lamps.
- viii. Customers Vigilance Week- (Awareness Program) was organized by the State Bank of India for the faculty and students at our college to generate awareness in the public at large about the ill effects of corruption.
- ix. When world was facing a pandemic and there was anxiety and indecisiveness in the minds of the people regarding hazardous effects of Corona Virus. Our society was in a mental, social and economic crisis which led to mental stress among the villagers. NSS and UDAAN team decided to take this opportunity to help humans in a small way. A 07-day camp was planned for the same.
- x. We thought of social activities to be conducted for people of Kelthan, Akloli, and Vajreshwari villages by conducting Yoga and Meditation sessions to help them achieve better mental stability.
- xi. Many activities were conducted in the camp. India is growing dynamically in every field but bias against a girl child is still prevailing. The root cause of the declining sex ratio is the backwardness of society. Hence a rally – “Save the Girl Child “was organized to educate the villagers.

- xii. Drawing enables a child's imagination to become more active. It also helps to map out mental images of the world that we see around us. To bring out the hidden talents we organized drawing competitions among the children.
- xiii. Nowadays, street play is used to convey a message to the crowd watching it. It creates awareness and leads the way towards positive change. Our team used this platform to educate villagers on waste management and rainwater harvesting.
- xiv. One should always be ready to handle any physical attacks. Physical fitness and Self-defense should be imbibed in teenagers to counter such attacks. NSS and UDAAN team conducted workshops on self-defense, Zumba, and Aerobics.
- xv. Seldom villages have power cuts which hamper their studies, by using solar energy we taught them how to create a solar lamp. Our idea was to stimulate young minds towards clean technologies for the future. Hence, we conducted a Solar ambassador workshop.
- xvi. Computer literacy is also an essential aspect in today's world, so to make them competent in this sector we organized an MS-CIT computer workshop.

4. Evidence of Success.

Schedule of events organized by NSS/ UDAAN committee in A.Y. 2019-20.

Sr. No	Name of the event	Place	No of Students participated	Period
1	Seminar on how to prepare for Gate Exam.	Seminar Hall, VCET	58	19/7/2019
2	Movie Screening – “Uri- The Surgical Strike “	K.T. Vision Theater, Vasai	220	23/7/2019

3	“Adivasi – Diwas” Celebration	Seminar Hall, College Campus	200	9/8/2019
4	Beach Cleaning drive Rajodi, Vasai-Virar	Rajodi Beach	25	25/08/2019
5	Tree Plantation drive	Near Jeevdani Temple, Virar	46	26/8/2019
6	Fit India Movement Campaign	Seminar Hall VCET	155	29/8/2019
7	Ganpati Visarjan	Manikpur Lake, Vasai	15	12/9/2019
8	Gandhiji Jayanti Rally	College to 100 Feet road& back to College	350	2/10/2019
9	Swachh Bharat Abhiyan	College Campus and Vasai Road Railway Station	105	2/10/2019
10	One day workshop on “Gandhi Global Solar Ambassador”	College Campus	175	2/10/2019
11	Customer Vigilance Week - (Awareness Program)	Seminar Hall, VCET	80	17/10/2019
12	National Unity Day	Seminar Hall, VCET	250	31/10/2019
13	Sanvidhan Diwas Celebration	Seminar Hall, VCET	200	26/11/2019
14	Beach Cleaning drive Navapur, Vasai-Virar	Navapur Beach	22	21/12/2019

NSS CAMP ACTIVITIES (Duration 25/02/2020 to 2/03/2020)

Sr. No	Name of the event	Place	No of Students participated	Period
1	<ul style="list-style-type: none"> • Inauguration • Sightseeing 	Kelthan, Akloli, Vajreshwari	50	25/02/2020
2	<ul style="list-style-type: none"> • Rally-save girl child • Yoga activities • Socio-Economic survey • School Interaction 	Kelthan, Akloli, Vajreshwari	50	26/02/2020
3	<ul style="list-style-type: none"> • Meditation and yoga • School competition: Drawing, Handwriting • Street play on waste management • Rainwater harvesting awareness 	KelthanAkloli, Vajreshwari	61	27/02/2020
4	<ul style="list-style-type: none"> • Aerobics and Zumba • Self-defense workshop • Women hygiene seminar • Sports competition for secondary school • Talent hunt for students 	KelthanAkloli, Vajreshwari	76	28/02/2020
5	<ul style="list-style-type: none"> • Aerobics and Zumba • Water quality survey • Career guidance in 	KelthanAkloli, Vajreshwari	50	29/02/2020

	secondary school <ul style="list-style-type: none"> • Socio-Economic survey • MS-CIT computer workshop 			
6	<ul style="list-style-type: none"> • Yoga activities • Solar ambassador workshop • Water quality survey • Socio-Economic survey 	Kelthan Akloli, Vajreshwari	65	01/03/2020
7	<ul style="list-style-type: none"> • Meditation • Valedictory session and group photo 	Kelthan Akloli, Vajreshwari	50	02/03/2020

In the rural areas, the teaching campaign has benefitted nearly 350 children.

5. Problems encountered, and resources required.

- i. Budding Engineers need to systematically plan their schedule to execute the task of the NSS and UDDAN committee as they are busy with academic activities all through the day.
- ii. Parents and their wards of villages need counseling from the committee members to execute the teaching campaigns as they do not consider education as a necessity.
- iii. Prior intimation to college authorities and parents is necessary as some activities or camps are executed for a span of few days or on Sundays or holidays.

Best Practice II

1. Title: VNPS (Vidyavardhini's National Project Showcase).

2. Objectives of the Practice:

- To provide a platform for the students to interact with the Industry experts and obtain their feedback
- To build a healthy competitive environment
- To be in pace with the latest trends in technology
- To upgrade presentation skills of the students

3. Context:

Contextual features and challenges faced

- The difference in engineering curriculum and industrial technical standards has stimulated to organize the project showcase as a measure to bridge the industry-curriculum gap.
- The completion is organized with the intention to cultivate leadership qualities, professionalism, and teamwork culture amongst the students.
- It is also a measure to remain in pace with the technological advancements and industry demands.
- Institute has students from various disciplines, belonging to vernacular medium and different economic and cultural backgrounds. Some of the students lack the confidence to communicate effectively. VNPS has led to an invariant platform for presentations and multidimensional growth.

The Practice:

The Institute organizes a annual national level project showcase named 'Vidyavardhini's National Project Showcase' (VNPS) wherein students from various technical institutes participate to display their projects. It comprises presentations in the form of posters and live demonstrations. Publicity of this event is done through posters and electronic media to register maximum.

Track 1 (Mechanical Engineering)

- 1) Thermal and Fluid Engineering
- 2) Design of Mechanical Components and Engineering
- 3) Advanced Manufacturing
- 4) Modern Automobile Techniques

- 5) Energy Security
- 6) Mechatronics and Automation
- 7) Aerospace Engineering

Track 2(Electronics and Telecommunication Engineering)

- 1) Microcontroller Embedded system.
- 2) Signal and Image Processing.
- 3) Sensor Network
- 4) VLSI Applications
- 5) Microwave and Radar Engineering
- 6) Emerging Communication Technologies.

Track 3(Instrumentation Engineering)

- 1) Control System Design and Simulation
- 2) Latest Trends in sensor design
- 3) Process Automation
- 4) Biomedical Instrumentation
- 5) IoT (Internet of Things)

Track 4 (Information Technology and Computer Engineering)

- 1) Cloud computing and big data
- 2) Artificial intelligence
- 3) Gaming
- 4) Web security and Networking.

Track 5(Civil Engineering)

- 1) Concrete and Structural engineering
- 2) Construction Management
- 3) Geotechnical and Transportation Engineering
- 4) Water Resources and Environmental Engineering

In the Academic year 2019-20, VNPS was planned, but due to the pandemic situation, the event is not organized. In that year we successfully organized Vidyavardhini's ONLINE National Conference on Technical Advancements for Social Upliftment (VNC-2020- TASU) on 27/06/2020. Technology has always been a potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, Industrialist, and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements.

There were different domains distributed in tracks in line with social upliftment:

1. Sustainable Computing
2. High Performance Computing
3. High Speed Networking and Information Security
4. Software Engineering and Emerging Technologies
5. Mathematical, Experimental, Computational and AI, IoT Techniques in Mechanical Engg.
6. Industrial Engg., ERP, MRP, SCM
7. Renewable Energy Technologies
8. Pollution Control and Waste Management
9. Advances in Structural engineering
10. Present geotechnical practices
11. Present practices in construction management
12. Recent developments in Instrumentation, Control, and Automation
13. Embedded Systems, IoT, and VLSI Design
14. Optical and Wireless Communication for NGN
15. Antenna and Microwave Devices etc.

5. Evidence of Success

- Total 160 Papers were presented in VNC2020 TASU.
- All papers presented in VNC2020 TASU were published by the International Journal of Engineering Research and Technology with ISSN Number 2278-0181.
- All papers are available on the following link of IJERT journal.
<https://www.ijert.org/ntasu-2020-volume-09-issue-03>
- The print of conference proceeding is also available in the institute.

6. Problem Encountered:

Young minds are less aware of research and development areas. At such instant faculty members interact with them and make aware of how research and development help society and the close association of engineering curriculum with research practice in different domains.

Institutional Distinctiveness

The vision of the Institute is to be a premier institute of technical education always aiming and becoming a valuable resource for industry and society. In line with its vision, priority, and thrust, we at VCET have a unique practice of “Product Showcase” which would eventually sharpen the student’s technical knowledge.

Every year, “VCET Students Chapter of various professional bodies and technical committees” organizes technical product exhibition. The products are exhibited by students themselves. It is an event for the students, by the students. Various industries specifically industries which manufacture the electrical, electronic and mechanical products are approached. The product showcase titles and their respective departments are listed below:

Sr. No.	Department	Title of Productshow case activity
1	Department of Mechanical Engineering	Mechexpo
2	Department of Electronics & Telecommunication Engineering	Anveshan
3	Department of Instrumentation Engineering	Yantra
4	Department of Computer Engineering	Abacus

5	Department of Information Technology	Elixir
6	Department of Civil Engineering	Nirmiti

Objectives:

- To strengthen Industry-Institute Interaction
- To bridge the gap between institute and industry.
- To learn about industrial practices
- To learn about work ethics
- To become aware of current market scenarios
- To gain indepth understanding of products and processes

The Process/Practice:

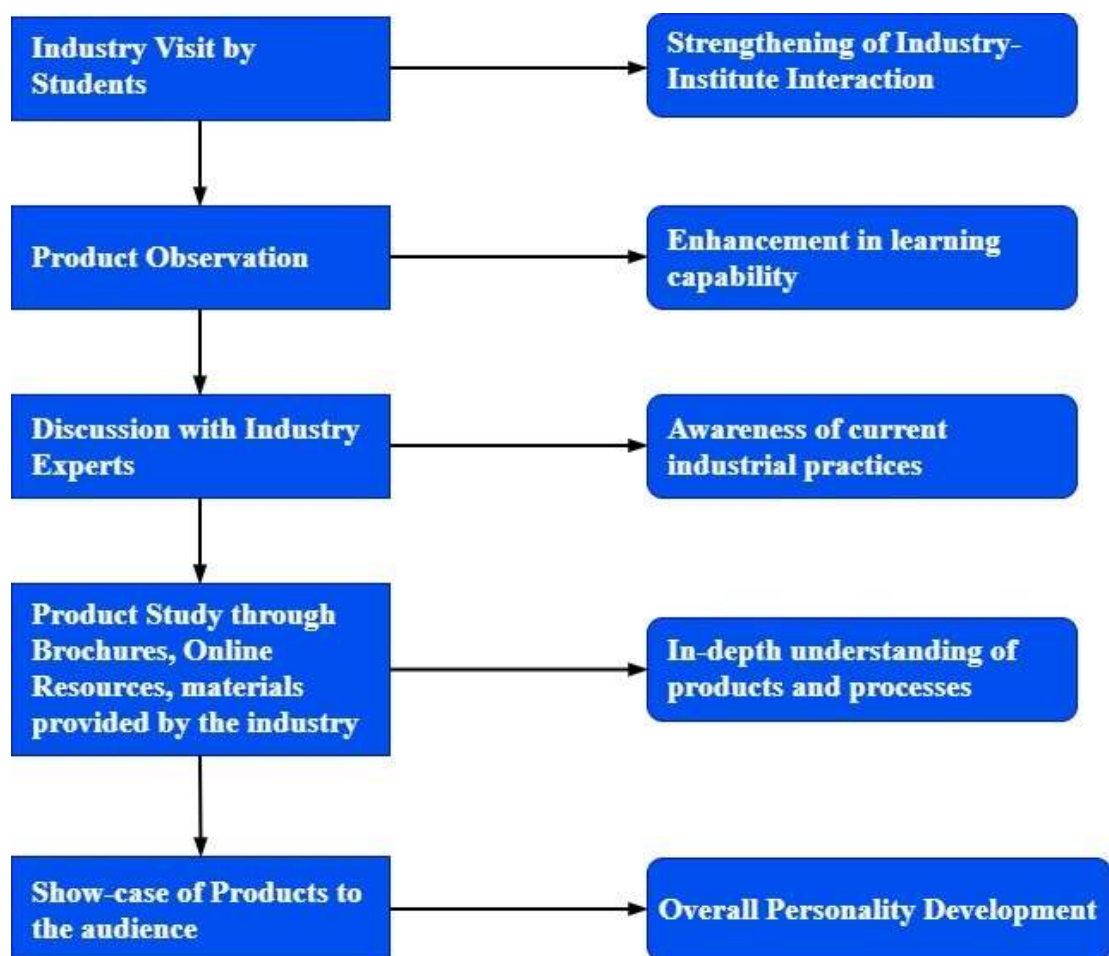
A month prior to the product showcase student committee members contact the companies stating the objective of the event and its mutual benefits. Companies then send the consent and the list of products that they could provide for display. A fortnight prior to the event, the products are collected by the students from the company and they receive an orientation on the product by the concerned technical staff and receive brochures for the same. Small scale industries to multinational companies have been a part of this event. The event is publicized through the college website, banners, posters, and mouth publicity.

On the day of the event, the students and faculty members from the college visit the stalls that are set up of these companies wherein the students give presentations and give a detailed explanation about the products on display. A competition for the best stall is organized and is judged according to presentation skills, technical knowledge, etc.

To assure the safeguard of the products, an undertaking is signed between the companies and the respective departments giving the assurance of the repair in case of any damage. The products are returned to the company after the event.

Since the students present these products to a large audience, it enhances not only their communication skills but improves overall personality. Students do these activities without affecting their academics, this way they also practice time management.

Process Flow:



Process Flow of Product Showcase

Evidence of success:

This event facilitates grooming of students like their communication skills, technical skills, team-building skills are polished which leads to their overall development. Apart from these benefits, they are also exposed to industrial work culture which certainly helps them after their graduation.

Some facts and figures are listed below:

- i) No. of Companies visited: 90
- ii) No. of students participated/visited: 1500