

7.2 Best Practices (30)

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Best Practices: I

(A) Title of the Practice:

Science for Vision, Inspiration and Prosperity (S-VIP)

Practice:

Science promotion through (S);

1. VidnyanManch, (V)
2. INSPIRE Camps (I)
3. Programs of Lecture Workshops, Refresher Courses (P)

(B) Objectives of the Practice:

- District level “**VigyanManch camps**” (For school Children):
With a thrust on ‘Catch Them Young’ for Creating a scientific outlook, To Explain scientific principles through experimentation, To enhance the quality of science education among the students and to prepare them for the National Wisdom Research Examination.
- **Innovation in Science Pursuit for Inspired Research (INSPIRE)** (For XI class students):
The basic objective of INSPIRE is to communicate to the youth population of the country the excitements of creative pursuit of science and attract talent to the study of science at an early stage and build the required critical human resource pool for strengthening and expanding the Science & Technology system and R&D base.
- **Lecture Workshops** (for UG & PG students):
To help and motivate students to improve their background knowledge in the specialized areas of their respective subjects
- **Refresher Courses** (For Faculties, Research scholars & PG students):
To Enable the teachers to keep abreast with the latest developments in their field of specialization and Provide exposure to emerging cross discipline advanced studies for taking up interdisciplinary research

(C) The Context:

- **VigyanManch:**
State Institute of Science and Mathematics, Nagpur in collaboration with Maharashtra state government organizes District level Vigyan Munch camps. Since inception from 1969 the college has been chosen to organize the district level camps. Various initiatives are implemented to inculcate the basic scientific concepts in school level students. A

seven day residential camp is organized for these students. The camp is guided through experiments and lectures.

➤ **INSPIRE Science Camps:**

The college in collaboration with Department of Science and Technology (DST), Government of India, organizes five days fully residential internship camps. The INSPIRE Internship camp- in which annually about 50,000 students of top 1% performers in Class X board examinations and pursuing science at higher Secondary level are being given an exposure with leaders in science in the Summer and Winter camps to experience the joy of innovations. Organizing these camps attract the talented students towards the basic courses to increase the research activity of our country.

➤ **Lecture workshops:**

The lecture workshops are the big opportunity for the UG and PG students to listen the eminent scientists from reputed scientific institutes all over the nation, who explore their knowledge that benefitted the students.

➤ **Refresher courses:**

The teachers need continuous innovative ways of teaching and to give more to the students always. The college in collaboration with Indian Academy of Sciences organizes refresher courses, for the faculty members and PG students, Ph.D. scholars from all around country to participate, learn and gain new prospectus of learning and to modify current teaching methodology in their respective subjects.

(D) Practice:

➤ **VigyanManch:**

A total of seventy (30 urban & 40 rural) students are selected from the VigyanManch pre-examination. The seven-day VigyanManch camp runs for eight hours a day as per pre-determine schedule. Three batches (of 30 + 20 + 20) students are allotted for the demonstrations in the subjects of Physics, Chemistry and Biology (Basic sciences). Apart from this, lectures are conducted daily by eminent scientists in various fields, doctors, pediatricians, Ayurveda experts and various activities are conducted like eradication of superstition, Science quiz competitions, educational trips, hand on experience and quizzes to enhance the scientific knowledge of the students. In these camps educational tour including visits to various industrial projects, cancer hospitals etc. are organized.

➤ **INSPIRE Science Camps:**

Dayanand Science College has the privilege of organizing fully sponsored Five days residential INSPIRE Science Internship Camps for the ten consecutive years since 2010. The students are selected from the vicinity of Latur and nearby districts. Selected candidates for the camp are accommodated in our campus. During last five years 9 camps are organized and 1850 students are benefited by these camps. The camps are meant for science students of class XI. These camps were a golden opportunity for the students to personally interact with various mentors like Indian Academy Fellows, senior scientists, University Professors, Bhatnagar Awardees and Scientists of National and International repute. It include lectures related to scientific success stories and the joys of innovations and lectures of basic sciences across all science stream. In these camps students are motivated by CD shows, round table discussions, experiment sessions, creative poster competitions, Seminars, science quiz, Hands on experience and field visits. The knowledge of different skills are also provided. The participating students are provided free transportation, local hospitality, related study materials, educational and registration kits. A certificate of participation and take-home experiment kit are given to the students at the end of the five-day Science Internship Camp. Scholar students are motivated to do research in future.

➤ **Lecture workshops-**

Indian Academy of Sciences, Bangalore; Indian National Science Academy, New Delhi; The National Academy of Sciences India, Allahabad in collaboration with Dayanand Science College, Latur organized 3 days Lecture workshops on Physics, Chemistry, Mathematics, Conceptual chemistry workshops for UG & PG students. In these workshops resource persons from IIT's, IISER institutes, National institutes and Universities are invited. More than hundred students from neighborhood colleges in the district and nearby districts are actively participated in each workshop. Due to Covid-19 pandemic, the college organized online Physics workshop in 2019-20.

➤ **Refresher courses:**

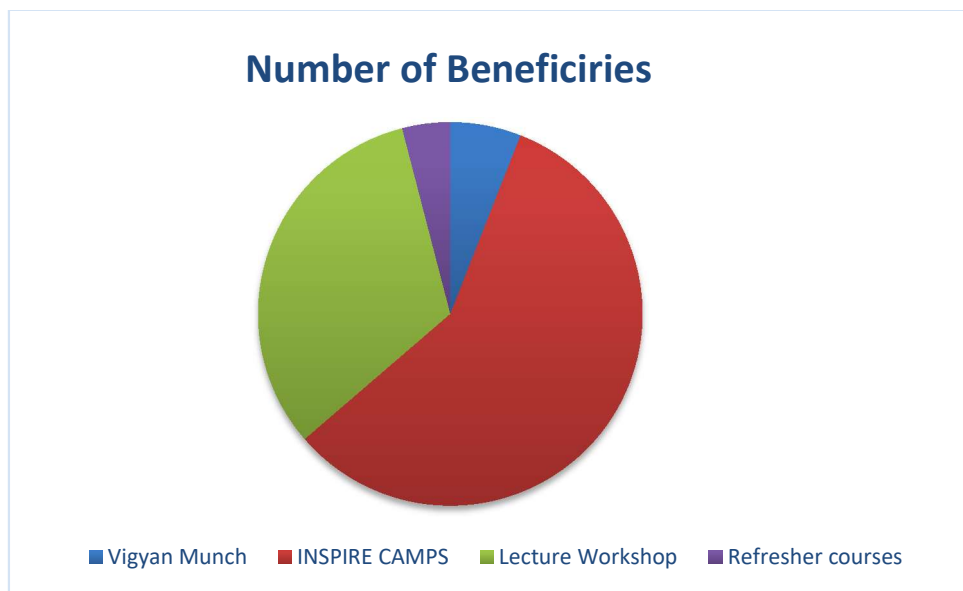
In last five years, four refresher courses of fifteen day duration (two weeks) are organized by the college in collaboration with Science Academies, India, in the subjects of Chemistry, Mathematics, Botany and Physics. The teachers, Ph.D, research scholars and PG students from all corners of the country participate and get knowledge and skills from eminent scientists like Indian Academy Fellows, Senior scientist, University Professors, Bhatnagar Awardees and Scientists of National and International repute. Various programs are conducted in these refresher courses including lectures and discussions on curriculum; seminars and excursion tour for participants.

(E) Evidence of Success:

During last five years 2833 students benefitted from the Best Practice and the total budget was Rs. **1,61,89,500/-**

Table showing the no. of beneficiaries in various activities in last five years

Name of Program	Academic Year	Budget	No. of beneficiaries	Total
Vigyan Manch	2015-16	45,500	70	140
	2019-20	35,000	70	
INSPIRE	2014-15	26,00,000	400	1850
	2015-16	26,00,000	400	
	2016-17	29,25,000	450	
	2017-18	13,00,000	200	
	2018-19	13,00,000	200	
	2019-20	13,00,000	200	
Lecture workshop	2016-17	1,87,750	150	713
	2017-18	1,79,500	160	
	2018-19	3,43,000	300	
	2020-21	47,500	103	
Refresher courses	2015-16	8,07,000	35	130
	2017-18	8,65,500	25	
	2018-19	8,85,500	35	
	2019-20	7,68,250	35	
Total		1,61,89,500	2,833	2,833



(F) Problems Encountered and Resources Required:-

Problems encountered:

- Initially there were less response of qualified meritorious students for admission to B.Sc./ basic degree courses but due to these programs the number of students enrolling to basic sciences increases.
- Due to Covid-19 pandemic, the above events could not be conducted due to restriction from the government authorities.

Resources required:

- The college aspires to interact with the Nobel laureates, but due to unavailability of national and international air flights in the region, it was not possible.

(G) Notes (Optional): The further details of the best practice are available on the college website