BEST PRACTICES OF THE INSTITUTION BEST PRACTICE -1

1. Title of the practice:

Extended STEM education at BV Jagadeesh Science Centre

2. The context that required the initiation of the practice:

Classroom teaching does not provide opportunity for self expression, constructive activities and independent enquiry. No time is assigned for practical work. All these lead to the need for an organisation providing an outlet for the pent up emotions of students and for pooling their energies. An organisation which caters for the calculation of scientific attitude and genuine interest in science and also can supplement the work of the classroom and give the syllabus a practical dimension is required.

In this regard, BV Jagadeesh Science Centre, Bangalore's complex for museum, library, research and education was established by the National Education Society of Karnataka [NES] in 2001. It was required to build and nurture an open community for learners, explorers and inventors in STEM. We believe it to be necessary to stimulate curiosity and inspire science learning in everyone, because we value science as an indispensable tool for understanding our world and enriching people's lives.

3. Objectives of the practice:

- To provide opportunities for bringing students close to the society and to acquaint the people with the services and contribution of science in their life.
- To develop among the students the spirit and attitude of healthy competition for the individual and social cause.
- To help the students in imbibing the habit of self-reliance, self-dependence and love for manual work.
- To inculcate scientific attitude. To provide opportunity for the development of the constructive, explorative & inventive faculties of the students.
- To develop training in scientific methods of problem solving.
- To develop students, interest and participation in the practical application of the knowledge related to different branches of science.
- To grate interest in scientific facts and events related to one's surroundings.

- To develop interest in scientific hobbies. To encourage individual and group activities.
- To stimulate active participation and initiative among students in the learning process.
- To develop creativity and encourage the habit of exploration.
- To widen the outlook of students, apply the knowledge in life situations.
- To provide opportunity for the development of the constructive, explorative and inventive faculties of the students.
- To create interest in the latest inventions and discoveries of science in various fields and to get acquainted with the life history and contributions of great scientists.
- To develop students, interest and participation in the practical application of the knowledge related to different branches of sciences.

4. The Practice:

We believe in learning science by doing science. Our mission is to create inquiry-based experiences that transform STEM learning. Our vision is a classroom where students think for themselves and can confidently ask questions, question answers, and understand the world around them. We value lifelong learning and teaching, curiosity and inquiry, our community, iteration and evidence, integrity and authenticity, sustainability, and inclusion and respect. Our workshops model an inquiry-based approach to science learning, encouraging participants to observe, experiment, and explore.

5. Obstacles faced if any and strategies adopted to overcome them:

There is a fallback in integrating academic curriculum with the activities of BVJSC. Lack of time for teaching faculties to be regularly involved in extended education initiatives. Shortage of funds to organise additional coursework for example: to equip with new programming languages and techniques related to data analytics. To manage the infrastructure available, and to execute the programs it is required to have full-time staff at the centre. As of now, these obstacles are managed by raising funds through collaboration with similar organisations. Students and alumni of the college have formed science clubs and manage the administration and execution of programs at BVJSC.

6. Impact of the practice:

The centre has conducted 8 major symposiums, 6 workshops, 100 movie screenings, 5 education initiatives in the past two years (from January 2019 to January 2022). Through this, over 5000 people from various backgrounds have walked into the centre and participated actively. To increase the online presence of the centre, 3 exclusive info-graphic contents are posted as news feed on social media platforms every day. Eminent scientists who visited the centre and delivered lectures include the Director of IIA, the former DG of DRDO, IPS Officers, and many professors from institutions like IISc, JNCASR and ISRO. The centre encourages a culture of interdisciplinary science and has delivered programs in both basic and applied sciences in a wide range of domains from astronomy to chemistry, mechanics to robotics, and nano-electronics to programming. In this journey, many organisations like Swami Vivekananda Youth Movement, Institute for Science Promotion Foundation and Bangalore Science Collective, have willingly collaborated with the centre and executed scholarship programs, awareness initiatives and also celebrated significant days in science. BVJSC and Jawaharlal Nehru Planetarium executed a mega event called Science in Action, in which around 3000 students from all the schools in the city had participated. The centre has started regular guided tours to the in-house museum for the visitors on weekends while the digitization of the science library, construction of a state-of-the-art multimedia hall is under process. The centre is exploring new avenues to achieve its objective of delivering Science for all.

7. Resources required:

- 1. Regular and adequate funding.
- 2. One full time staff along with active participation of lecturers in bridging the science centre with classrooms.

Best Practice 2

Title of the Practice: Bangalore Lalithakala Parishad

Context:

The National College, Jayanagar learning process to curricular activities but it strives to inculcate the skills among the students by conducting various co-curricular and extra-curricular activities for the holistic development of the students. Culture happens to be a prominent aspect of quality education. Students need to be explored to the rich and diverse capabilities of the fine arts and its role in moulding the students with artistic skills.

Objectives of the Practice:

The institution aims at nurturing cultural activities for which the Bangalore Lalithakala Parishad was established. The Dr. H.S. Murthy Intercollegiate Music competition and the B.C.S. Narayan Intersection Drama Competition were started to nurture artistic talent of the students in classical music and dramatics. The main aim of the best practice is to help the students not only to have all round personality development but also to provide a platform for the students to improve their skills and interact with the performing artists.

The Practice:

- 1. A well maintained auditorium, H.N. Kalakshetra is in place to conduct all the cultural activities.
- 2. Under the Bangalore Lalitha Kala Parishad, the college has organized cultural performances in dance, Music and Dramatics by eminent artists on every Friday of second and third week of the month. Since 1992 about 869 Cultural Programmes have been organized and in the last five years, 127 programmes have been organized.
- 3. Nearly from twenty seven years, the Inter Collegiate Dr. H.S. Murthy Music Competition has been organized to provide a platform for budding talents in both Classical and Folk Music. It is a prestigious competition attracting a number of students from various colleges.
- 4. The B.C.S. Narayan Inter Section Drama Competition has nurtured the talent of the students in dramatics for more than 40 years.

Challenges:

It was a great challenge organizing the Programmes on a regular basis and attracting the students as well as public. Students those who did not have exposure to the art forms were initially hesitant to take part in the competitions. It needed more skill and determination on the part of class teachers to motivate the students to participate in such competitions. Moreover it was difficult to organize performances without any break by eminent artists. Nurturing these best practices required a lot of funds on regular basis and a responsible person to conduct these programmes without any break. Surely these practices are worthy of being emulated by other institutions also.

5. Impact of the Practice:

Over the past five years, 127 cultural programmes have been organized through the Bangalore Lalitha Kala Parishat. The Dr. H.S. Murthy Music Contest is a prestigious competition attracting a number of students from various colleges from the past 27 years. The B.C.S. Narayan Inter Section Drama Competition has nurtured the acting talent of the students year after year and is greatly appreciated by the student community. At least 10% of the students are getting benefitted by such activities every year and the students who are into theatre are doing exceptionally well in both academics and fine arts.

6. Resources Required:

A lot of planning had to be done in organizing the Bangalore Lalit Kala Parishat Cultural Programmes in order to organize the programmes successfully on First and Third Fridays of every month.

The Management had to meet the financial requirements for conducting the Dr. H.S. Murthy Intercollegiate Music Contest and B.C.S. Narayan Inter-section Drama Contest.

8. About the Institution

i. Name of the Institution: National College(Autonomous), Jayanagar, Bangalore.

ii. Year of Accreditation: 2004

iii. Address: 36th B Cross, 2nd Main, 7th Block, Jayanagar, Bangalore.

iv. Grade awarded by NAAC: 'A' Grade

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