



St. Joseph's College For Women (Autonomous)

Visakhapatnam

NAAC Reaccredited & ISO 9001:2015 Certified

BEST PRACTICE-II

KINDLE

Title of the Practice:

Adopt a School & KINDLE The Glow

Know – INquire – Deduce – Learn to Experiment (KINDLE)

The Objectives of the Practice:

It aims at creating awareness based on the VAK (Visual, Auditory & Kinaesthetic) Model of learning among the High School children through 'Hands on' Learning experiences.

- Kindle the spark of scientific pursuit
- Light the Lamp of Knowledge
- Ignite the passion for higher learning

Learning outcomes:

kindles interest in beyond classroom activities among school children studying in vernacular/ English medium and make them realize their potential promotes analytical thinking among students. enhances research aptitude

The Context:

This practice is designed similar to the INSPIRE Programme of DBT of GOI. This microlevel science education programme is an academic outreach initiative completely funded by the institution itself. The college applied for an APCOST project in 2012 and was denied. But the coordinator did not want to give up on the idea and, therefore, has been continuing with the practice since 2012.

This Practice initiated by the Chemistry Department was called CASE (Creating Awareness in Science Education) a decade ago for High School students of vernacular medium, with the aim of developing scientific zeal among them. With the passage of time, it then became relevant to reach out to students from all socioeconomic backgrounds, challenge their 'out-of-the-box-thinking' and sow the seed of research in their vibrant minds. Since it diversified and included many other departments, as per changing needs, it was rechristened KINDLE in keeping with the Motto of the College 'Kindle the light within'.



The Practice:

- The preparative work for implementation involved detailed stage wise planning.
- Permission of the School authorities and rescheduling their regular classes according to the students' classes also were proactive challenges handled well
- This academic outreach initiative is unique because of its impact of students from not only a vernacular medium but from a low socio-economic background.
- Departments like Zoology, Botany and others started demonstrating section cuttings, museum specimens and live demos and Mathematics Dept used Mathematrix & Vedic Maths to dispel fear of Maths.
- Gradually the Psychology UG & PG students briefed young school children on hygienic habits, suicide prevention, adverse effects of early marriages as part of their Extension Work in Counselling.
- The UG students of English took One-hour classes for Teaching Practice

1. Selection of Topics:

The faculty from the various departments identified topics to be included, both for the Audio-visual presentation as also the Demonstration, after studying the Text books. High School students visited the college on the specified days in groups and each group was shown one set of experiments & were allowed to practice the same, with other compounds. (Chemistry Dept)

2. Identification of Schools:

The schools from, which the students were involved, were identified based on the medium of instruction, the distance from the college, enthusiasm of the children and teachers besides the willingness of school administration. Sacred Heart Girl's High School (campus) and St. Peter's High School and other neighborhood schools (Chemistry, Zoology, Botany, Mathematics, Psychology, English) were chosen.

3. Implementation of the Programme:

This initiative has been rekindling interest in the subject through observing, doing and recapping by the students as they could take up research later with the seed sown. Even the PG Students in MSc Chemistry, Maths and Psychology found it excellent training ground.

4. Mathematrix / Vedic Maths training for the students:

Vedic Maths classes made the students realize the importance of Mathematics while eliminating fear and enhancing their confidence and performance in Maths.

5. Developing better habits of positive thinking:

Sessions by Psychology students on personal and psychological hygiene, power of positive thinking and preventing suicide tendencies made the young school children optimistic clarify doubts and confident of doing well in life.

Problems Encountered:

- Neighbourhood schools were chosen to avoid bringing the children from a distance
- Resource mobilization was another constraint as considerable amount was required especially for chemicals and other subject practicals besides expensive equipment.
- Due to the tight schedules in the Semester Pattern for Practicals, the Faculty had to adjust laboratory schedules for college students

Evidence of Success:

After the programme, the feedback was collected from the students which are the indicators of the success of the programme.

- ✓ A very good initiative and more of these programmes should be conducted.
- ✓ The experiments/classes were quite exciting and the subject easy leading to better learning experiences.
- ✓ The whole exercise was a very good experience which developed interest in the subject especially Chemistry and Botany for further research.
- ✓ Students who took the Mathematrix classes felt their fear of Maths had decreased by 80% and would recommend that others learn it.
- ✓ The English classes were appreciated by the students as it made them want to learn good English including Grammar
- ✓ This Best Practice led to increased external funding for Waste Management from a US University by Renu Yadav, Alumna of US Exchange Program in 2018
- ✓ This initiative led to exponential growth in admissions from local schools.



B.A. English students teaching the students at different schools



Celebrating Mathematics Day at Haragopal School with Dr. Capt. K. Sujatha, Head, Department of Mathematics, SJCW inspecting the event