

## **D.A.V. PUBLIC SCHOOL**

No. 19, Sitaram Nagar, Velachery, Chennai-42  
Plot No. 131, 132, 130 & 135, Bhuvaneshwari Nagar, 2<sup>nd</sup> Main Road, Velachery, Chennai-42

### **REPORT ON “CASCADING WORKSHOP FOR MIDDLE LEVEL SCIENCE 2025–26”**

**Date: 31.05.2025**

**Venue: II Floor, DAVPS, Velachery**

**Time: 10.30 a.m. to 12.30 a.m.**

#### **Topics:**

- 1. Demystifying Science at Middle and Secondary Level**
- 2. Designing Rubrics in Science**

#### **Resource Persons:**

**Ms. V.A. Valli Rajkumar, TGT**

**Ms. Saranya Saravanan, TGT**

The cascading workshop was attended by the Teachers of Science from Grade II to XII.

The objectives of the workshop are as follows:

- To reinforce experiential and contextual learning.
- To facilitate discussions on competency-based questions and case-based questions.
- To develop rubrics for internal assessments in accordance with the DAVCAE Scheme of Assessment.

The offline workshop started by sharing the following tips with the Science Teachers for a better and healthy learning environment:

1. No textbook reading and translation.
2. Do not tell everything to the students.
3. Use 5E model to plan activities.
4. Never go empty-handed in a class.
5. Plan and prepare age-appropriate internal assessments.
6. Design a rubric for all internal assessments.
7. Celebrate scientific thinking and effort, not just results or content.
8. Use formative assessments regularly.
9. Reflect and adapt.
10. Set Expected learning outcomes before delivery of the topic.
11. Use a variety of tools and techniques with a specific purpose.
12. Prepare a list of transdisciplinary words from each chapter.

Under the Category of Teaching Biology, the light was shed on the following points:

- Usage of lab apparatus
- How to maintain practical records?
- Tips for a good diagram
- Usage of Statement Cards
- Usage of Keywords / New Vocabulary

**Hands-on activity** was conducted for the participants to try on “Statement Cards” and they made beautiful cards with phrases and statements to develop the critical thinking and inquiry skills of the students.

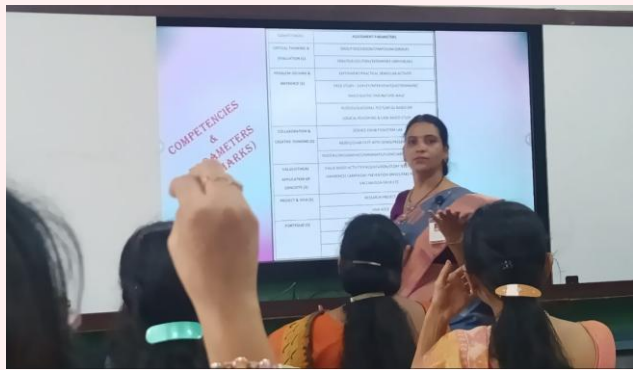
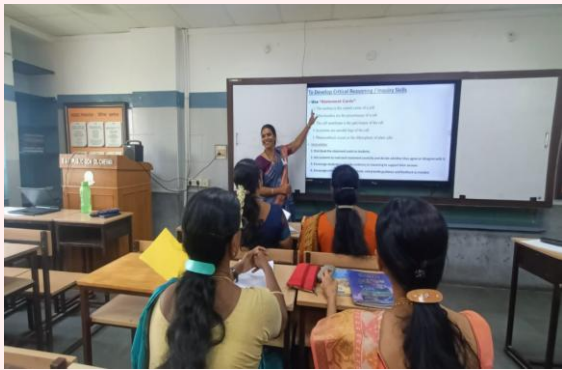
Later, the purpose of designing an activity to meet out the challenges faced by the students in understanding a concept was discussed. The teachers were roughly told about the format of documenting their activities for the academic year.

Under the topic “Designing Rubrics in Science”,

- the significance of deciding an activity to meet the needs of the students,
- setting up of the criteria for an activity
- designing rubrics for each criteria
- grading scale and scoring guide

were shared along with an example. An age-appropriate pattern of questions for Grades III to VI, as per DAVCAE instruction, was discussed with the teachers of respective classes.





The 5E model was explained in detail with an example.

- The 5E model is a planning tool for inquiry teaching that provides a structure for students to connect science ideas with their experiences and apply their learning to new contexts. The 5E's are

**Engage:** The teacher uses short activities to promote curiosity.

**Explore:** A lab investigation or hands-on activities are usually introduced in this phase as students attempt to investigate a problem.

**Explain:** With the teacher's guidance, students explain the concepts they explored in the previous phase and demonstrate their understanding of the new terms that were introduced.

**Elaborate:** Students apply their knowledge to new experiences and extend their conceptual understanding as they solve a problem.

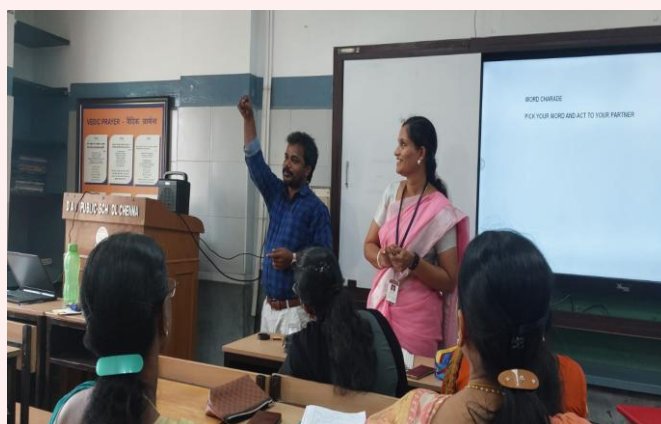
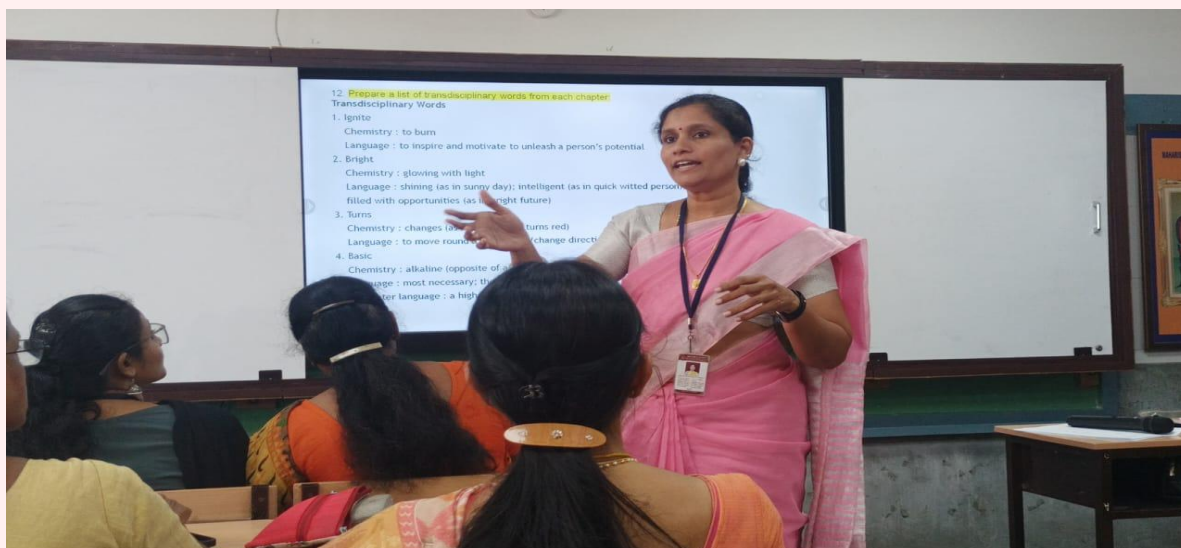
**Evaluate:** Students will be evaluated for their learning and demonstrate their understanding and mastery of key concepts.





Some of the experiments in the class VII and VIII were discussed and demonstrated. Teachers are asked to frame many competency-based questions based on the experiments demonstrated. Different activities like word play, word chain and word charade were explained and played.

Teachers enthusiastically participated in the activity games. These activities enrich students' vocabulary and science terms.



The participants raised many queries and all their doubts were clarified. Finally, the participants shared their feedbacks that the cascading program was very informative and assured that their takeaways will be implemented in their classrooms.