D.A.V. PUBLIC SCHOOL No. 19, Sitaram Nagar, Velachery, Chennai - 42 Plot No. 131, 132, 130 &135, Bhuvaneswari Nagar, 2nd Main Road, Velachery, Chennai - 42

REPORT ON THE CASCADING IN - HOUSE TRAINING FOR THE SCIENCE TEACHERS OF STD. I TO X

Name of the Master Trainer	: Ms. Udhaya V
Venue	: D.A.V. Public School, Chennai
Date	: 07.06.2025 (Saturday)
Timings	: 10:30 a.m. – 12:30 p.m

The Training Program was conducted by the Primary, Middle and Secondary School Science Teachers. . **OBJECTIVES:**

- Addressing challenges in Learning Science at the Primary Level.
- Creating Science Pitara for Science Learning.
- Discussing tried and tested Experiential learning ideas incorporating 5-E model.
- Building Science Skills through questioning.

SESSIONS CONDUCTED:

- Understanding the theme 'Science Pitara'- Creative Pedagogical Practices as per NEP 2020 5E Model.
- Assessment of Science at Primary Level
- Discussion of Typology of questions and their weightage given in Pen and Paper Tests at Primary Level.
- Question Framing- MCQ's Some of the Dos and Don'ts
- Effective Ways of using diagram in learning Science.

ACTIVITIES CONDUCTED:

- Designing an activity to transact a concept as per 5E Model and its documentation.
- Framing questions that builds skills like Observation, Critical Thinking, and Curiosity among students.
- Making a list of Scientific Vocabulary and Transdisciplinary words with their meanings.
- Framing MCQs aligning to Bloom's Taxonomy and picture-based.

KEY HIGHLIGHTS OF THE SESSIONS:

A discussion on the Results of Std. X and XII (2024-25) was facilitated. Some of the challenges in Science Learning were identified and Suggestions were brainstormed to convert challenges into Success.

The 5E Model (Engage, Explore, Explain, Elaborate and Evaluate) was introduced as a powerful strategy to make learning more student-centric and experiential as per NEP 2020. To exemplify its classroom relevance, a self-created educational video was presented on the 'Water Cycle', effectively demonstrating how each phase of the 5E Model can be seamlessly integrated into a lesson delivery.

A sample format for documenting Activity-Based Learning, highlighting the importance of maintaining structured records for Assessment and Reflection was also shared. This was followed by a discussion on the Role of scientific reporting and how proper documentation supports both evaluation and the reinforcement of Learning Outcomes.

A significant point of emphasis was the identification and listing of scientific and transdisciplinary vocabulary related to the concepts taught. This helps to build strong language connections and promotes academic fluency across subjects.

Furthermore, Sample Questions that promote observation, analysis and critical-thinking were provided. The Sample Questions ignited curiosity, which is an essential component for developing the competency of students and enhancing their holistic approach to Learning Science.

Teachers were sensitised about the mindful use of play dough while making Teaching Aids.

ASSESSMENT FOCUS:

A specific segment of the session was dedicated to Assessment at Primary Level. The following points were discussed.

- Typology of Questions: Guidance was provided on the types of questions to be included in Paper-Pen Tests during the preparatory stage through a sample Blue Print. Objective type questions, Very short answer type Questions, Short answer type questions, Case-Based questions and Long Answer Type questions.
- Framing MCQs: Key points to remember while designing Multiple Choice Questions (MCQ) were shared.

DIAGRAM IN SCIENCE AS A TOOL:

• Practical tips were also provided on how to teach and assess scientific diagrams.

CONCLUSION:

The Workshop was interactive, with active participation from the attendees who appreciated the practical tips and classroom strategies. The Integration of pedagogy, assessment techniques, and documentation practices aimed to build a holistic teaching-learning process.

The Session concluded with a shared understanding of how engaging methods and thoughtful assessment can together foster a deeper understanding of Science among young learners and provide opportunities for collaboration.

