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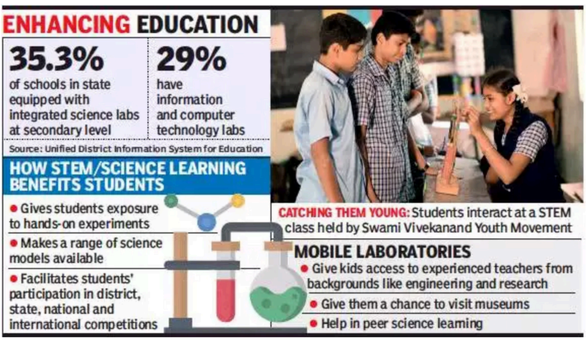
Mobile labs and science centres help govt schoolkids get over subject fear

Aditi Gyanesh | TNN | Updated: Jan 1, 2019, 12:27 IST

BENGALURU: Four students from Government Model Higher Primary School, Hebbal, have been shortlisted for INSPIRE 2018 awards initiated by the ministry of science and technology to promote innovation in the subjects among schoolchildren.

The feat comes as another feather in the cap of Bengaluru government schools, where science and maths are no longer dreaded by students, thanks to initiatives like setting up of STEM (science technology engineering mathematics) laboratories in the institutions by NGOs and volunteers.



"I have designed a smokeless train using solar panels. I am experimenting with wind energy to make it faster and more efficient," said Ravi Kumar D, a class 7 student from the Hebbal school. The other winners are Mithun from class 6, who came up with a waste management model, and Anil and Vasant Kumar from class 8, whose

"Our students were on a par with their private school counterparts, who have access to good science labs," said Umme Salma, science teacher at the government school.

The school has had a science lab for long but it was not used due to shortage of time and logistics. Mobile science labs began visiting the school and teachers started holding classes at a science centre set up on the campus by an NGO. The enhanced quality of education reflected in the numbers — admissions went up from 425 in 2017 to 535 in 2018.

"When we started mobile science labs for students in government schools, the excitement to learn was palpable. Some of the kids are quick learners. That's what made us set up this centre. Students from 10 nearby government schools can visit the centre, innovate and experiment," said Dilip Gowda, head of the science centre set up in the school by Agastya International Foundation.

The foundation runs about eight science centres in government schools in Immadihalli, Electronics City, Yelahanka, Sarjapur Road and Kengeri, among other places.

Ramesh Atloori, son of a construction worker and resident of a 100sq ft tenement in Viveknagar, has two foreign jaunts to his credit. In 2016, he represented a robotics team at Robocup International in Leipzig, Germany, and he visited Japan the next year to take part in the event's 2017 edition. He was accompanied by his schoolmates Aravind Reddy, Ramakrishna and Lawrence Aga, who have a similar background like his. "It was a dream come true. It was our teacher's motivation which took us to these places," said Ramesh.

The quartet was from Seva Bharath Trust Government Telugu Higher Primary School, Viveknagar, and was drawn to robotics during their STEM education classes.

Sridhar P, an IISc graduate, who left his cushy job to train government school students in robotics, has taken students from six government institutions to international competitions. "STEM labs help in students' overall development, instilling qualities like peer learning, leadership and creativity in them. They give students the confidence that they can make something work. They also connect science and maths to real-world problems. Unconsciously, the students become computer literate too," said Sridhar.

"Thanks to the robotics project we started on a pilot basis in Seva Bharath Trust Government Telugu Higher Primary School, students wanted to spend more time in class. They created LEGO robots, a humanoid and what not. Students are bright enough to grasp concepts; it's all about giving them access," said Sushmita Ananth from Akshara Foundation.

Vandana P, a teacher from RT Nagar Government School, said that lack of access to labs and rote learning of science with focus on theory make students fear the subject.

"When students are made to do experiments their textbooks cite, they begin to love the subject," said Praveen Kumar from Swami Vivekanand Youth Movement, which is currently teaching STEM in 25 primary and 25 high schools in Bengaluru and Dharwad each.