

US robotics gives govt school glimpse of future

Shradha.Chettri
@timesgroup.com

New Delhi: Himanshu Shakya was pleasantly surprised on Tuesday when he reached school and found his science teacher urging him to rush to the laboratory. Initially circumspect, the 16-year-old was flush with excitement four hours later, having created a soft robot claw.

This was the first time in his 12 years of school that the student of Rajkiya Pratibha Vikas Vidyalaya (RPVV), Dwarka, had made something of his own. And for this, he has Ankur Goel to thank for. The alumni of RPVV, Yamuna Vihar, and fellow at Harvard Biodesign Lab, Massachusetts, US, was at the school to conduct a two-day robotics workshop. "After Class XII, I want to study engineering, and participating in the workshop was a great experience. I am very interested in robotics because I think it is the future," said a happy Shakya.

On Tuesday Shakya and 14 other Class XII and VIII students attended the workshop. On Monday, 15 Class IX students had done so. They used Harvard Biodesign Lab's Soft Robotics Toolkit to make the electric claw. The initiative was started by Professor Conor Walsh in collaboration with Professor Donal Holland and is funded by Tata Trusts through The Lakshmi Mittal and Family South Asia Institute, Harvard University.

Goel, 22, explained, "The goal is to educate students in cutting-edge soft robotics re-



HANDS-ON LEARNING: The students of RPVV, Dwarka, used Harvard Biodesign Lab's Soft Robotics Toolkit to make an electric claw

search through hands-on learning. Our toolkit team develops low-cost kits that can be used in underprivileged classrooms in India." Overseeing the workshop was R P Singh, Goel's teacher at RPVV, Yamuna Vihar, and now the principal of RPVV, Dwarka.

"Having studied in a government school, I understand there are constraints of exposure," Goel said on why it was important for government schools to have this sort of experience. "When I went to IIT-Delhi, I found people straight out of school comfortably handling materials, unlike me."

RPVV, Dwarka, was one of the two schools chosen for the workshop, the other being Shiv Nadar School, Noida. Vikas Kumar, Shakya's classmate, would not stop playing with the silicon in the toolkit and exulted, "I am doing all this

for the first time." And Shakya already saw how his creation could be used: "One can attach the soft robotic claw to a drone for lifting light things."

Singh was excited to see the curiosity of his students. "They so quickly understood how to make these things. They will never forget it," he said. And as a participant of Monday's workshop ran in to ask him for permission to take the claw to show his friends in his colony, the principal smiled broadly, "This is how education should be imparted, with students getting hands-on learning."

Science teacher Kusum Nagpal is thinking of how to give more students the same experience. "Apart from the silicon, other kit items can be replicated. Maybe we can try with clay," she said optimistically.