



Sat. Jan 17 2015, 12 19 AM IST

Lounge Loves: Parikrma Science Festival

Hands-on experiments and field visits around water at a children's festival in Bengaluru



Participants will use simple kits to test water quality.

Most 13-year-olds would be loath to look up their home water bill. The document certainly looks dull. And it doesn't capture any of the negotiations that accompany the daily collection and use of water. Like the one about parents waking up at 5am to fill up overhead tanks or the political drama surrounding the division of waters across state boundaries, and the mammoth challenge of cleaning up lakes and rivers.

The inaugural Parikrma Science Festival, starting in Bengaluru on Monday, will devote an entire session to decoding a water bill. Around 200 class VIII students, from 20 schools, will compare the water bills for different properties, from a small eatery to a five-star hotel and their own homes, to "audit" how much water is consumed, and wasted, every day. They will make a list of gadgets that use water, and conduct experiments like Tippy Tap, designed as a simple demonstration to help participants see for themselves how much water they use for something as routine as washing hands.

Show, rather than tell. Perhaps one of the best-known examples of this is physics lessons by Prof. Walter Lewin at the Massachusetts Institute of Technology, US. He mounted a wrecking ball to explain the action of a pendulum and rode a fire extinguisher-propelled cycle through a lecture hall to demonstrate how rockets lift off—he is now retired, but the lectures are available on YouTube.

Universe2U, a science learning programme of the Bengaluru-based non-profit and festival organizer, Parikrma Humanity Foundation, takes a similar approach. The foundation has been using demonstrations and hands-on experiments at its schools in the city to train some 1,600 slum children and orphans in the applications of science. It invites professors from around the world to demonstrate the science behind how things (like a rocket) work to children who are "first-generation learners", according to founder Shukla Bose. "We wanted to take these learning methods to other schools as well," says Bose. That's how the idea of a science festival came about.

Environmentalist Arshiya Bose says the aim is to get the children "thinking, talking about and seeing rather than being told" about the applications of science. Bose, who was part of the core committee that designed the festival, says the programme includes field visits to a water treatment plant and music and arts programmes inspired by water. "There will be a contemporary performance by the Thaalavattam percussion-based group, which uses waste materials like old water pipes to make music, in addition to classical performances," she says.

Toads will become agents to show the interdependence of ecologies and dirt will become a medium to precipitate understanding of ideas like percolation and capillary action. The festival is meant for teens who don't mind getting their hands mucky.

The Parikrma Festival Of Science will be held from 19-23 January, 8.30am-3pm. JN Tata Auditorium, National Science Symposium Complex, Sir CV Raman Avenue, Kodandarampura (19 January); and the University of Agricultural Sciences (GKVK), Bellary Road, Bengaluru (20-23 January).