

For maths teacher Manjari Patil, numbers are beautiful

The name Manjari Patil might not immediately ring a bell, but this maths teacher has been quietly working towards ensuring that when children learn their numbers, it becomes a pleasurable task rather than a drudge.

With this leitmotif, she has developed a teaching-aid kit with which she has conducted 800 workshops in 100 institutions across the country to drive home her point that the 'weak-in-maths' tag should not be a disqualification for students.

'I don't care much for marks. My main aim is to make children enjoy studying maths. The marks will follow,' Patil, who could change the way teachers look at the subject, told IANS.

'My goal is that even if 40 percent of my students say they like maths, it's like getting an award,' said the soft-spoken teacher at the Anandalaya School run by the National Dairy Development Board at Anand, 90 km from here.

She has set up a company called 'Concept Mathematical Teaching Aid' to make the teaching-aid kits in collaboration with Educational Initiatives, an NGO launched by three alumni of the Indian Institute of Management-Ahmedabad.

'The maths kits are simple,' Patil explained.

'Teachers focus on theory but learning by rote has no relevance. Up to 14 years of age, a child needs support to conceptualise this. For example, when we speak about volume, surface area, edge of a cube or square, children need to have models in their hands and my kits address this deficiency,' she said.

The kits cater to different levels of learning.

A triangle kit, for instance, has two levels for Class 3 and 4 students. A kit with three cones enables a child to fill a cone with sand, and this flows into a cylinder, the student can know what space and volume is all about.

Likewise, ascending, descending, and negative numbers all become crystal clear with Patil's models, while the concept of minus 2 being less than minus 1 is explained with a model of a wooden staircase.

'If we place the numbers on the steps, a child immediately understands how minus numbers operate,' Patil explained.

'Even students of Class 9 and 10 are tender. Show them the models and they will understand math better,' she added.

Patil then raised a fundamental question: 'Are we teaching in a manner that the pupils get it? Are they grasping properly? To make learning interesting and fascinating something needs to be done drastically, far from the beaten path,' she maintained.

'We brand, not realizing its horrific consequences; a child is branded incompetent if he or she does not understand maths. Knowing maths does not mean always scoring.

'A teacher should first work on a child and then come to a conclusion. How can students understand when you pressurize them to recite by rote the spelling of 'T-W-O' correctly and then ramp up the numbers to 500 and 1,000?'

'Let the child first understand the concept of 2. The teacher should show her two hands or two eyes or ears so that the child understands what 2 means,' Patil explained.

'All students cannot be toppers. Imagine if everyone gets 100 per cent marks. Will it be a healthy society?' she asked, adding: 'Every child has a plus point of its own.'

According to Patil, education 'is not merely books; it is a holistic process of life. We must, therefore, help our kids prepare for the future battle of life.'

After obtaining a masters degree in science, Patil initially taught maths to college students before joining the Anandalaya School that is considered to be one of Gujarat's best English-medium schools.

Former president A.P.J. Abdul Kalam had visited to the school in 2002 and had interacted with its students.

Patil has two children and her husband works as a veterinary doctor in Anand.

'I am happy. My family fully supports in my work,' she said with a smile.

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