

Maths can be fun if students discover it themselves: Fields Medal winner

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Bengaluru: Numbers have always been the best friend of **Manjul Bhargava**, a Canadian-American mathematician who has won the Fields Medal, known as the mathematician's Nobel Prize.

Speaking to TOI on the sidelines of the ICTS at Ten event, the maths professor from Princeton University cracks the code on why mathematics is different for a researcher when compared to a student. According to Bhargava, mathematics gets an altogether different look when poetry, history and more are weaved into it.

You approach maths from an artistic perspective. How hard is it to bridge the gap between maths and fun?

Most mathematicians think of their works as art rather



What inspired you to take up mathematics? How are people getting attracted to research in this field?

I always loved playing with numbers and shapes. But one common factor among most mathematicians is that school maths never interested them. It was either one particular teacher or a parent or a stint at a maths camp that inspired them to join the field. Once you are allowed to discover the subject on your own, through mistakes and trials, you start loving it

than science. Any pure mathematician would be delighted if they hear their work is elegant or beautiful.

But the problem is that today's kids are unable to look at the subject this way. I was lucky to learn maths on my own. My mother was a mathematician who always asked me to figure out problems in

the subject by myself. This was how I started perceiving the subject as fun.

Why aren't we able to achieve these forms of learning and teaching in today's classrooms? How is it different from the maths pedagogy in US?

Our textbooks today have largely remained the same since

the pre-colonial era. Students are forced to learn rote and not given the opportunity to explore the subject on their own. There's not much difference in the way it's taught in the US either. Maths isn't taught too well there much like here.

How can we incorporate learning through discovery into the new education policy?

Drafting the education policy has brought together many brilliant minds across the country who truly want to transform the education system. There are a lot of committees working on every detail. Bringing in change is not impossible as long as there's a change in mindset, a change in our textbooks and a change in teacher training. The system has to be learner-centred and based on discovery and interdisciplinary learning.