Early age best time to expose kids to science and maths

KOTA KINABALU: Young learners need science and mathematics to be taught in a more interactive, fun-filled learning environment from an early age—the key foundation for success in their formal schooling years.

"Children are naturally curious in their first five years, and this is the best time to introduce science, mathematics and reading skills. However, the correct technique is needed," said Prof Das' Dr Noraini Bte Idris, Chairperson of the National STEM Movement.

She underlined the importance of nurturing greater interests in science and mathematics among young learners through experiments, quizzes and other innovative teaching approaches to help them develop the passion for science, technology and mathematics (STEM).

Noraini said introducing science and mathematics at an early age is part of immediate measures to increase the number of students entering the STEM field, and lamented the drop of intakes is worrisome.

"Unfortunately, statistics show science and mathematics subjects are not the choice for many young people, only 19 percent from 447,000 pupils took up STEM subjects after Form Three," she said.

To reverse the decline, Dr Noraini said the STEM Movement will be working closely with Universiti Malaysia Sabah (UMS) on the Young Scientist programme to promote more effective teaching and learning approaches for science and maths in Sabah schools.

"The aim is to inspire kids about science and mathematics at an early age to develop their passion and confidence in applying the knowledge in an enjoyable teaching and learning environment," she said.

Shifting away from memory-based learning to a learner-centred and interactive approach is the change that needs to happen in schools, stressed Dr Noraini. The first onboard the Young Scientist initiatives led by UMS in Sabah is SK Rampayan Menggatal.

"Children can appreciate the learning experience better if you make it enjoyable in a way they can apply what they learn in real life, like growing vegetables, science experiments, quizzes," she said.

When this interest is instilled from a young age, Dr Noraini said it would be easier to motivate students to pursue science and mathematics when they start school and all the way into university.

Under the young scientist initiative, Dr Noraini said young learners will be taught how to apply maths and science in real life situations, noting creativity elements will also be added into the module which will also promote logical thinking among youngsters.

Furthermore, she also said teachers will also be encouraged to join the programme to learn smart learning techniques they can apply in their classes.

"The Young Scientist programme is being implemented in Sabah through UMS focusing on SK Rampayan. Hopefully Yayasan Sabah or the State government can offer their support for this initiative led by UMS to produce more young people entering the field of science and mathematics.

Meanwhile, the university's Dean in the Faculty of Psychology and Education, Prof. Dr. Mohd Dahlan Hj. A Malek said UMS hoped to implement the Young Scientist programme which was launched recently in Oct 2.

"In other countries, kids enjoy a very interactive, engaging learning environment where they learn to apply science and maths in many enjoyable activities that also develop soft skills, including critical thinking, writing, working in teams and communicating effectively. We hope to make school more fun, and enjoyable for young kids to promote self-learning and passion in STEM subjects. This concept is important and can go a long way in helping young people develop their full potential," said Dr Mohd Dahlan.