



Ch'ng Yeang Soon with his students Muhammad Akmal Mokhtar and David Teah Xing Qiang using his innovative teaching method.

BALVIN KAUR
AND DAWN CHAN
GEORGE TOWN
news@nst.com.my

INNOVATIVE TEACHERS MAKE LEARNING FUN

ADDITIONAL Mathematics is not an easy subject to comprehend, let alone master.

However, thanks to Ch'ng Yeang Soon's innovative teaching method, learning the subject is definitely more bearable.

Ch'ng, 56, a teacher for more than 30 years, has come up with a way of teaching Additional Mathematics through spreadsheet-like Microsoft Excel.

"Spreadsheet was initially viewed as a software designed for business applications, but it has gained popularity for Mathematics in recent years. It allows users to perform many complicated calculations using its multifunctions and formulas.

"What I have done is create spreadsheet modules that guide the students to understand equations better.

"Through this method, students are not only able to retain the concepts better and for longer, they, too, are able to see Mathematics from a different perspective," he told the New Straits Times at SMK Penang Free here.

Despite his achievement, Ch'ng said he never imagined he would become a teacher.

"When I was younger, I dreamt of becoming a pharmacist. One day in my Lower Sixth Form while teaching my classmates, one of them said 'Ch'ng, you are a good teacher'.

"That remark stuck with me and I decided to enrol at Universiti Pertanian Malaysia for a teaching course."

Ch'ng said for the first five years, he taught at a school in Mukah, Sarawak, and was then transferred to another school in Sungai Bakap here for three years.

"After that, I approached my alma mater, Methodist Boys School here, but was rejected.



Kristnadevi Sundaram

"I then got an offer to teach at Penang Free School and I accepted it," he said, adding that he has been teaching Additional Mathematics at the school for the last 23 years.

Ch'ng said his creative and innovative journey, which started after 2003, came about after he was selected for a course organised by the Education Ministry and given the Excellent Teachers Award.

"That course opened my mind and I realised I was no ordinary teacher.

"The ministry had chosen me and was paying me to teach, and I have to live up to that faith."

He said he then started with a simple spreadsheet, which he continued to improve on yearly.

"I made it my personal goal to give



Students of SK Pulau Indah 2 using the Smart Kit.

my students something new every year to excite and inspire them."

Ch'ng is working on an improved and accessible mode of learning Additional Mathematics.

"I taught myself Java Coding and created an application that allowed students to study and learn from anywhere, even using their mobile phones.

"The application is still in its early stages, but so far, some students, who were failing previously, were able to pass after learning to use the application."

In Port Klang, teacher Kristnadevi Sundaram created the Smart Kit, a self-correcting magnet-based learning tool, which she had first thought of

in 2011, to bring out the best in preschoolers.

The 36-year-old teacher from SK Pulau Indah 2 in Bandar Armada Putra said the Smart Kit took two years to materialise into the tool it is today and has since been used to teach preschoolers effectively.

The Smart Kit contains a Smart Block component, which has 25 blocks and a row of 5 rods.

Preschoolers have to match the pictures with answers on the blocks, which are to be inserted into the vertical rods.

By magnetic force, correct answers would fit into the rod perfectly, while a wrong one would cause the blocks to turn away from its position. This

makes the preschoolers put on their thinking caps to seek the right answer.

For the Smart Kit invention, Kristnadevi emerged third in the national level Innovative Teacher Competition for Individual Preschool Category 2014.

Also a champion at the Selangor state level, Kristnadevi said the Smart Kit was a result of her thoughts on her preschoolers whose grasp of the English language was lower than expected.

"It was after I taught a class on the science of magnets that I realised I could apply that to teaching. My classes were all about me talking and teaching using flash cards and it was hardly interactive.

"Using this Smart Kit, which are magnetic blocks that are interchangeable to suit English, Bahasa Malaysia and Maths classes, it encourages interaction and higher-order thinking skills. A wrong answer would mean a block couldn't fit so it makes them think about the right answers. The Smart Kit is a self-learning method, which is more engaging, hands-on and their learning progress had sped up.

"With the Smart Kit, it takes preschoolers three months instead of five to read simple words, phrases and sentences," said Kristnadevi who has been teaching at the school for six years.

The Smart Kit, which costs RM160 to make, is a portable tool that comes in a wooden box and houses other components such as the Smart Board, Smart Cards and a Smart Guide that contains 50 activities that can be conducted in a class to help diversify the learning process.