Frogs and soft drinks make maths fun

MARTINA SIMOS

Technology is not always the answer to encouraging mathematical thinking, a teacher educator says.

Queensland University of Technology, Mathematics and Mathematics Education lecturer Dr Calvin Irons said it was a big challenge for teachers to come up with lessons that would interest today's students. "Sometimes when it comes to developing thinking in mathematics, don't rely on technology because the thinking does not come out with technology," he said.

"If students are doing activities that are very non-technical oriented, that's perfectly fine. Sometimes technology is so fast, all you are doing is pushing the buttons."

Dr Irons said it could be easier for newly-graduated teachers to connect in the classroom in other ways because they were more aware of their students' interests.

At Loreto College, Year 7 students have been predicting and then recording the mass and volume of cans of lemonade and chocolate frogs as part of their maths lessons.

This term, they are learning about volume, mass, mean and median through the Middle Years Program, which is part of the International Baccalaureate (IB).

The IB philosophy sees teachers introduce a question for investigation, which can cover different curriculum areas. In the maths unit about statistics, the question was: "Can we believe everything we read?"

"Girls really understand theory more when it's hands-on - it gives them a context and it really gets them thinking where they can apply this every day," teacher Marie Douvos said.

Students also record in a reflection journal and make fruit bars out of playdough, following specific instructions.

"It was once common practice in mathematics for students to simply memorise the process, without understanding why," Ms Douvos said.

"This means that when they are given problems in different contexts, they may not always know where to go - if they reflect on what they have done, they can apply that knowledge to any sort of question."

Year 7 student Verity said their weighing and measuring exercise found the volume and mass of products to be higher than the advertised amount.

"Mathematics is much more interesting and easy to understand when we are doing practical lessons than when we are purely studying out of the textbook," she said.

SA defies national training decline

MARTINA SIMOS

SOUTH Australia has bucked a national trend, with a significant increase in the number of students enrolled in publicly-funded training programs.

The Australian vocational education and training statistics: Students and courses 2013 - preliminary data, published by the National Centre for Vocational Education Research, (NCVER), provide a snapshot of training activity, taken from an annual collection of student enrolments.

Only SA reported a rise in student numbers (up 16.3 per cent), while enrolments remained the same in Tasmania and declined in all the other states and territories.

Nationally, the total number of students enrolled in publicly funded training for last year fell 3.1 per cent to 1.88 million students - down from 1.94 million in 2012.

NCVER managing director Rod Camm said the national decrease could be partly the result of the decline in the number of apprenticeships.

We'll examine this much more closely between now and July, when we publish detailed data on publicly-funded training activity, he said.

"The increases reported in South Australia are most likely the result of the introduction of Skills for All (a State Government training initiative), that took effect in July 2012."