

Study finds cash and coins help engage primary maths students

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Credit: University of Western Sydney

Primary school students are more likely to understand and engage with maths if classes use real money and real-life projects, according to a Western Sydney University pilot study.

The findings come as Australian [students](#) lag behind other countries in maths, with Year 4 students dropping from 18th to 28th out of 49 countries in year 4 maths in the latest Trends in International Mathematics and Science study.

The project leader, Associate Professor Catherine Attard from the School of Education, says the pilot study aimed to tackle one of the most common complaints about maths classes- that they lack relevance outside school.

"Students expect to be taught information that is meaningful and makes sense to them," says Dr Attard.

"This can present a problem when teaching mathematics, because some content and approaches in school are often radically different to everyday maths students use in real life."

"To remedy this, we worked with teachers to provide new and purposeful learning activities and projects based on financial topics such as value for [money](#), profit and loss, loans and credit cards."

Funded by Financial Literacy Australia, the study investigated whether children would be more involved with mathematics if lessons focussed on [financial literacy](#) through hands-on activities dealing with real money.

Four primary schools from low socio-economic areas in metropolitan and regional Australia took part, with students from Year 1 to Year 6 taking part in a range of activities from the Money Smart program and student designed projects.

Some of the activities involved coin counting games such as Wipe- Out, while others involved organising market stalls, establishing small businesses and fundraising activities to promote and sell products.

Dr Attard says the teachers reported a big change in the students' attitudes and understanding of maths during the activities.

"At the beginning of the project, almost all of the participants had a very narrow view of money, simply knowing basic concepts such the difference between rich and poor, and money's importance for food, water and shelter," she says.

"By the end, most of the students were very interested in the topic of money, and were able to link their discussions to their own lives, and understand complex concepts such as value for money, lending, interest rates, and mortgages."

"Most importantly, they had fun working on their projects and wanted to learn more, with reports of young students emailing teachers for advice and getting parents involved in their learning."

The study recommends activities teaching financial literacy should play a more prominent role in classrooms, to both improve engagement with mathematics and help deliver important life lessons to children.

"The Australian curriculum currently includes Money and Financial Mathematics topics, but the study showed these themes could be greatly expanded by using real-life scenarios such as those in the study," says Dr Attard.

"Importantly, a future focus on students in Years 5 to 8 may have a bigger impact due to the students having more access to money and their ability to comprehend more complex money and financial mathematics."

Paul Clitheroe, money expert and Chair of Financial Literacy Australia, has praised the project.

"Giving our kids money skills is critical to their future in a complex world. It is really valuable to see that teachers can use everyday money topics to build their kids' interest in [maths](#) – and help make them money-savvy," he says.

Provided by University of Western Sydney

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