

Education Review

NEWS

Making maths memorable 7

Why girls are not interested

FEATURE

Leadership lessons 13

What makes an effective school leader and why?

DISTANCE & ONLINE

Connecting cultures 14

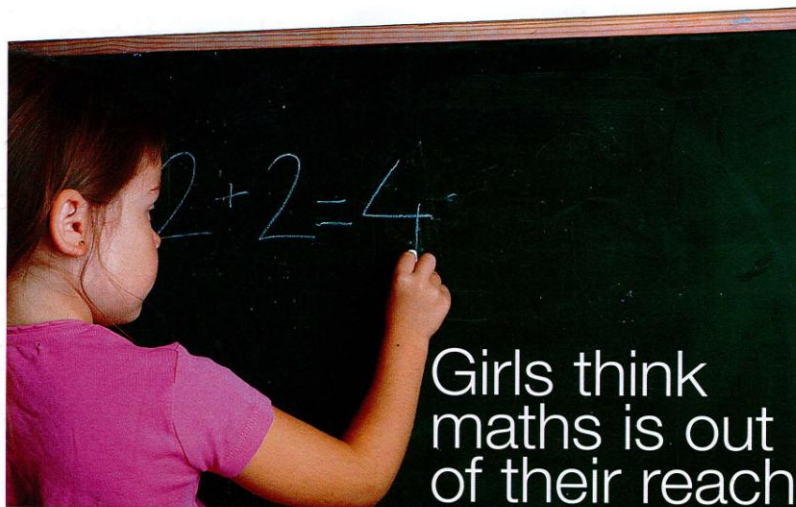
How two schools learnt to appreciate their differences

OPINION

The three Rs of research 16

Is educational research going deep enough?

NEWS 07



Girls think maths is out of their reach

Maths studies should be linked to everyday situations to grab girls' interest, a study has found. Monash University's Dr Helen Watt, who conducted a three-year study of secondary students in NSW, said girls were not taking up careers in maths because they were not interested in the subject matter, not due to a lack of ability.

Watt said her study of students in Years 7 to 11 suggested girls needed to be told they are just as capable as boys.

Strategies to increase girls' participation could also include linking maths to social uses, such as medicine, she said.

"Girls have been found to be most engaged by activities they perceive to be socially meaningful and important," Watt told *Education Review*.

"Therefore, making explicit connections between maths and its social uses and purposes should better engage girls.

"Adolescents also often have quite inaccurate ideas of what careers involve developed mathematical skills

and we should convey detailed information about the maths required for a range of careers.

"If girls find that maths is instrumental to careers in which they are interested, this should promote their interest."

Boys on the other hand have an "illusory glow" about their ability in maths which open doors for them in higher paying maths-related professions.

"There were no gender differences in measured mathematical achievement, but males undertook higher levels of senior high maths and further, aspired to more maths-related careers," Watt said.

"Since lower female maths achievement therefore could not be the reason for this imbalance in maths participation, I examined whether females were less interested in maths, and whether they considered themselves less able at maths."

Watt said the lower interest and self-concept in maths had substantial flow-on effects to maths participation and a significant impact on the workforce.

The gender differences in relation to maths were in place from early on, implying these issues needed to be addressed, she said.

"We need further research to determine exactly when it is that young boys' and girls' maths-related self-concepts and interests begin to diverge, so that intervention efforts can be concentrated from that point.

Watt's research was part of an international study that looked at gender imbalance in maths participation between boys and girls in Australia and the US and is published in the most recent edition of *Equal Opportunities International*.