

'CATERING FOR THE MATHEMATICALLY GIFTED MIDDLE SCHOOL STUDENT'

In tandem with the release our latest publication, G.A.T.E.WAYS is offering a professional development session. The session will run after school from 4.30 – 6pm and will be offered at the following venues:

Monday November 10th: Moonee Ponds Primary School, 87 Wilson Street, Moonee Ponds

The cost of the session is \$60.00 and will include a copy of the book (RRP \$49.50)

Teachers can ring G.A.T.E.WAYS ON 9894 2116 or email <u>denise@gateways.edu.au</u> to register a place

There are students in our classrooms who have unusually strong reasoning ability in mathematics; they quickly master new concepts and skills that exceed those of their classmates as well as year-level expectations. Providing for mathematically talented students is complex and influenced by many factors. These factors fall into three main categories:

- The different levels of mathematical giftedness
- Teacher involvement the mathematical background of the classroom teacher
- The availability of appropriate resources that challenge students and provide opportunities for them to learn substantial mathematics.

In the first part of this workshop G.A.T.E.WAYS program co-ordinator Meg Pini will address the general issues and research-based options.

The second part of the session will introduce an example of a suitable mathematically rich resource that can be used to extend students.

'The Peculiar Puzzles of Professor Fibbernacho' was developed by G.A.T.E.WAYS presenter *Anne Eastaugh*. The inspiration for the book came from a program Anne ran successfully for gifted primary students. These students loved solving riddles and cracking codes. They also loved exercising their problem solving skills, and challenging themselves with complex problems. The book provides students with these opportunities.

Although this book has been written for students, hopefully it will also inspire teachers. It has been written in the hope that not only will students have access to many beautiful mathematical ideas, but that generalist teachers will gain the confidence and competence to explore these concepts with their students. Anne and Meg will provide advice and demonstrate how teachers can use some of the following topics from the book in their own maths programs in the regular classroom or with a withdrawal group.

- Sequences (including the Fibonacci sequence and the number phi)
- Handshake Problem
- Tower of Hanoi
- Binary Numbers (including finger binary)
- Clock Arithmetic
- Seven Bridges of Konigsberg

Anne Eastaugh is a mathematician, musician, writer and teacher. She has a Bachelor of Science with Honours in Mathematics and currently teaches first year maths at Monash University. Anne has taught many G.A.T.E.WAYS programs over the past ten years, using creativity and imagination to guide students through the magical, mysterious and beautiful world of mathematics.

Meg Pini is passionate about mathematics and education. As an accomplished teacher, whose aim is to inspire curiosity and wonder in students, she has taught both physics and mathematics to secondary students from year 7 through to VCE. She is currently undertaking her Masters of Education specialising in Gifted Education and Mathematics and Science Education

