



MAT 2010 CONFERENCE PROGRAM (PROVISIONAL)

FRIDAY

4pm Registrations open and afternoon tea served

4.45pm to 5.45pm Workshops

Year Level	Presenter(s)	Presentation
Primary	Georgia Perry	Tinkerplots
Secondary	Tich Ferencz	Mathemagicians
Senior Secondary	Neville Windsor	Interactive Documents on the TI N-Inspire

6pm to 7pm Keynote speaker – Irene Penesis

7.30pm onwards – Conference Dinner at Casablanca, Penguin Surf Club, Preservation Bay

SATURDAY

7.30am Registrations open

8am to 9am Breakfast

9am to 9.50am Keynote speakers

Year Level	Presenter(s)	Presentation
Primary and Secondary	Judy Anderson	AAMT Response to the Australian Curriculum
Senior Secondary	Sue Ferguson	The Senior Secondary Curriculum

9.50am to 10.45am Discussion groups or workshops

Participants have the opportunity to either attend a discussion group or a workshop during this time. The purpose of the discussion group is to investigate the curriculum for the appropriate year level and then provide feedback/raise issues. It provides an excellent opportunity for teachers to become familiar with the Australian curriculum. If you have already seen the curriculum before and feel that you have been provided with adequate opportunity to give feedback, then you may prefer to select a workshop session instead.

Discussion Groups
K-2
Primary
Middle
Secondary/Senior Secondary

Workshop Year Level	Presenter(s)	Presentation
K-2	Denise Neal	Triangles. What? How? When?
Primary/Middle	Noleine Fitzallen	Financial Literacy
Secondary/Senior Secondary	Peter Fox	Maths Amnesia

10.45am to 11.15am Morning Tea

11.15am to 12.15pm Workshops

Year Level	Presenter(s)	Presentation
K-2	Dianne Ashman and Tracy Muir	Numeracy at Home
	Gerard Tuffield	Tomorrow's Mathematics Classroom Here Today
	Michelle Smith	Maths on the Interactive Whiteboard
	Wendy Palfreyman	Tools for revealing what students think
Primary/Middle	Jamos Somerville-McAlester	Maths is an option – how do we make students opt for it?
	Kim Beswick	Negative numbers
	Sharon London	Class discussions
Secondary/Senior Secondary	AMC	
	Judy Anderson	Using NAPLAN items to develop students' thinking skills and build confidence

12.15pm to 1.15pm Lunch (MAT Annual General Meeting will occur during this time)

1.15pm to 2.15pm Workshops

Year Level	Presenter(s)	Presentation
K-2	Michelle Smith	Maths on the interactive white board
	Denise Neal	Triangles. What? How? When?
	Dianne Ashman and Tracey Muir	Numeracy at Home
Primary/Middle	Brett Stephenson	Kangaroos and handshakes (up to senior secondary level)
	Kim Beswick	Negative numbers
	Sharon London	Learning online
Secondary/Senior Secondary	Jane Watson	Cheating Partners and conditional probability
	Peter Fox	No Thought Left Behind

2.15pm to 3pm Closing Session

Feedback from discussion groups

Closing

Draw/Prizes

Further Information on the Presentations

Irene Penesis

An ocean of Opportunity: Exposing Students to Real Application of Mathematics

What is the point of doing this? A common question asked by students of maths teachers. With a major reduction in the number of students studying pre-tertiary maths, we are attempting to motivate and inspire students to continue their maths studies by showing them the relevance of their maths work by revealing broader applications.

Brett Stephenson

Kangaroos and handshakes

Now that the National Curriculum expects us to make quadratic equations accessible we will need to look at ways of introducing quadratics to all students. Using graphics calculators and a couple of kinaesthetic situations this workshop will look at 'algebra by stealth'.

Peter Fox

Mathematical Amnesia - (MA)

Have you ever wondered what your students were doing last lesson when you were teaching them? How can we assess students learning within minutes of starting a lesson? This session looks at brain based learning strategies including formative and summative assessment tools; interesting and challenging questions that assess thinking will be included. Caveat: the content may be provocative, so be prepared.

No Thought Left Behind

The Computer Algebra System is a catalyst thrust unto the mathematical curriculum designed to increase student thinking. This workshop focuses on a series of problems that highlight the appropriate and effective use of CAS. After teaching and researching CAS for the past 10 years, I have collected a wealth of mathematical GEMS, come along for the ride of participants help guide this investigative journey.

Tich Ferencz

Mathemagicians

Mathemagicians are people that can astound audiences with their impressive number computational skills. In this workshop you will investigate some mathemagic and see how it can be used to switch on students interest in mathematics.

Gerard Tuffield

Tomorrow's Mathematics Classroom Here Today

Learn how ORIGO's new online maths program Stepping Stones let you:

- navigate in a teaching sequence to differentiate instruction
- prepare for teaching by viewing professional learning videos
- effortlessly access appropriate teaching aids for lessons
- access perfect learning objects without searching to find them
- consolidate mental strategies through games
- utilize story big books with related IWB tools to develop mathematical concepts
- project illustrations, diagrams and students pages with/ without answers
- select from a range of assessment techniques including multiple choice, short answer and performance tasks.
- define mathematical terms
- know you program addresses the Australian Curriculum and will remain current despite curriculum changes

Michelle Smith

Maths on the Interactive Whiteboard

This session will demonstrate the mathematical resources of the main Interactive Whiteboards brands in schools on the NW coast and include a look at the video footage of how people are using the IWB at all levels of education to assist in their teaching of maths.

Jane Watson

Cheating Partners and Conditional Probability

This workshop will provide an opportunity for teachers to interpret conditional statements from a newspaper article, present the associated data in two-way tables and check claims made about males being better at detecting cheating partners than females. It is expected that the topic will be relevant to the new Year 11/12 Mathematics Curriculum due out in draft form from ACARA by the time of the conference.

Denise Neal

Triangles? What? How? When?...

Geometry is a strand of the Australian Curriculum that many early childhood and lower primary teachers will explore with their classes in new and different ways as a response to the new curriculum and the technology-rich world. This workshop will explore some interesting ways to investigate triangles with young children using true and tried hands on equipment and some online interactive.

Dianne Ashman & Tracey Muir

Numeracy at home

This workshop will explore ways in which we can encourage parents to be involved in their child's numeracy development. Participants will be provided with practical suggestions, including strategies for conducting parent information sessions and developing numeracy take home packs.

Jamos Somerville-McAlester

Maths is an Option- How do we make students opt for it?

Teaching maths is no easy task. Maths is a beautiful game that can be played with, but it's also a powerful tool for doing serious tasks (kind of like a hammer, only more... heavy). How do we balance the crucial elements of exploring fancy ideas, unexpected applications of maths, and learning things like time tables? Come and explore the benefits of using maths puzzles and guiding students on how to make their own puzzles. See why we introduce some of the more abstract parts of maths. Get some resources to help state you do similar things in your classroom next week.

Neville Windsor

Interactive documents on TI-Nspire

Come and learn how to use sliders to create interactive documents for students use on the TI-Nspire. This workshop is suitable for teachers with little or no experience with TI-Nspire.

Judy Anderson

Using NAPLAN Items to Develop students' thinking Skills and Build confidence

National testing programs provide challenges and opportunities for teachers of mathematics. One challenge is to focus on the diverse learning needs of students while preparing them for national testing early in the school year. An opportunity arises if we use test items to assist students who have difficulty reading and interpreting mathematical text, to further develop students' thinking skills and to analyse common errors and misconceptions, frequently presented as alternative solutions in multiple choice items. One approach to 'teaching to the test' is to use NAPLAN items as discussion starters so that students develop number sense, adopt new problem-solving strategies and build confidence and resilience.

Wendy Palfreyman

Tools for Revealing What Students Think

Participants will explore some hands on, practical and easily used tools to investigate students' thinking in maths.

Noleine Fitzallen

Financial Literacy

This workshop is to get feedback from teachers on the PD requirements for supporting Financial Literacy activities in classrooms.

Australian Maritime College (AMC)

Applying Maths in Maritime Engineering

The aim of the session is to:

- apply the maths students are currently studying in real-life engineering applications
- encourage the students to continue studying maths
- show the students where studying maths can lead in the future

Kim Beswick

Now there are twice as many numbers! Approaches to teaching negative and positive numbers

Negative numbers are less difficult than some concepts with which middle school students grapple but unless carefully taught operations with them can be learned in ways that reinforce unhelpful views of maths as a collection of meaningless rules and procedures. In this workshop we will explore two models for negative numbers that can help to build rich understanding as a basis for procedural fluency and later meaningful work in the context of algebra. We will also touch on early primary opportunities for introducing the idea of numbers less than zero.

Sharon London

Class Discussions

Discussions in the classroom can promote understanding and deep learning, providing students with a range of alternative viewpoints and opportunities to talk about their mathematics and reflect. Participate in a variety of activities aimed at encouraging students to debate, discuss and reflect while you, as their teacher, can listen and learn about how your students engage with mathematical concepts.

Learning online

Engage students and enhance their mathematical experiences using the online learning and teaching system, HOTmaths. Fully integrated lessons provide students and teachers with a wealth of resources including interactives, lesson notes, assisted problem solving, worksheets, investigations, skills practice and assessment questions as well as a dictionary, topic quizzes and even some games. A wealth of reports is also available to teachers to assist in lesson planning and reporting.