SHORT CIRCUIT

Newsletter of
the Canberra Mathematical Association INC

Coming Events:

Wednesday, June 18	*Afternoon workshop series*
August 16	*2014 CMA Conference*
	"Catering for Diversity"
November 11	*2014 CMA Annual General Meeting and dinner - Erindale College, 7 pm.*

Afternoon workshops:

Term 4: To be announced

VOLUME 5 NUMBER 2

JUNE, 2014

FROM THE EDITORS

Two related trends are currently giving the CMA committee something to think about.

One is a healthy and very welcome influx of new memberships, including quite a few pre-service teachers along with individuals and institutions.

The other is the strong demand for the Wednesday Workshop series that Ed Staples is managing. By next Wednesday evening we will have had a session on dates and calendars presented by Ed and also Mike Clapper's talk on the value of problem solving, both done twice, once at Namadgi School and again at Radford College.

Each of the sessions has been fully subscribed, some with a waiting list of people hoping to get in.

An easy inference is that teachers are responding to the professional development requirements laid down under the *ACT Teacher Quality Institute Act 2010*.

Whatever one might think about the wisdom of this innovation, its consequences are what we must now deal with.

On behalf of the ACT mathematics teaching community, CMA has been in discussion with AITSL, TQI and the ACT Department of Education regarding Professional Standards requirements.

Catering for the professional development needs of mathematics teachers has always been a major part of the reason for CMA's existence. (See page 4.) Members and others can be assured that CMA will continue to do what it can to meet the burgeoning demand, particularly where the need is for improved subject knowledge and for ideas in mathematical pedagogy.

A further trend that will be of interest to CMA members has been expressed by Professor Geoff Prince in a recent press release:

Australia's international position in key school mathematics indicators has declined sharply, according to a confronting report by the Australian Mathematical Sciences Institute (AMSI).

The report mentions school classes without qualified mathematics teachers, low intakes into Maths and Science tertiary courses and under-representation of females in Mathematical contexts.

If this AMSI report moves our leaders to make realistic policy changes, it is conceivable that CMA's ability to help in the up-skilling of existing ACT Mathematics teachers may be called upon.

In this event, CMA members will again contribute their voluntary labour for the good of the cause.

MEMBERSHIP

Membership of the CMA includes automatic affiliation with the Australian Association of Mathematics Teachers and a free AAMT journal.

Members are entitled to cheaper rates for CMA professional development events and the annual conference.

A membership application form for the CMA can be downloaded from our website:
http://canberramaths.weebly.com/

Note:
Receipts for membership payments are normally sent out by e-mail. If you have paid for your membership but have not received a receipt or if your AAMT journal(s) have not been arriving, please advise CMA treasurer, Paul Turner, or a committee member.

PUZZLE

Powers of three.

It is not hard to find two numbers that are powers of 3 such that their sum is a multiple of 10. For example,

$$3^1 + 3^3 = 3 \times 10$$

But is it possible to find two powers of 3 whose sum is a multiple of 13?

ANU—A CONFERENCE: Effective Visualisation in the Mathematical Sciences

.... We are planning a strong focus on mathematics education during the conference. Below is a link to the conference website.

Regards, Louisa Barnsley

http://maths.anu.edu.au/events/effective-use-visualisation-mathematical-sciences-evims-2

GLOBAL EDUCATION

Council of ACT Education Associations

Five Global Education workshops are being held after August, with each being on one of the 'Five Pillars' of Global Education – Sustainable Futures, Peace Building & Conflict Resolution, Social Justice & Human Rights, Identity & Cultural Diversity, & Interdependence & Globalisation.

For details visit the website:
http://www.globaleducation.edu.au/

CONNECT WITH MATHS

There are now two *Connect with Maths* channels:

Make it count with Indigenous learners
Early Years Learning in Mathematics

WORLD CUP

With the soccer World Cup coming up, Oxfam has created some resources for senior Primary and junior Secondary Maths teachers and students.

The resources are mapped to the Australian curriculum. They explore a range of issues centering around the 2014 World Cup in Brazil.

Activities include a global game to help students examine inequality between and within countries. The game introduces soccer players and other people who have taken action to make the world fairer. It examines news around the World Cup, considers how making new rules in soccer could make the game fairer, and promotes better understanding of the causes, effects and solutions to inequality.

The full list of downloadable resources is available from Oxfam Australia's Schools Program website – www.oxfam.org.au/education

---

For another look at World Cup issues, check this article spotted by John Carty:
http://www.nytimes.com/2014/06/06/upshot/australia-finds-itself-in-bad-spot-in-world-cup.html?smid=tw-nytimes&_r=1

AAMT

If you are a member of CMA, you are automatically a member of The Australian Association of Mathematics Teachers and should receive your journal and other communications directly from the AAMT office in Adelaide.

Some resources:

Top Drawer Teachers – http://topdrawer.aamt.edu.au

Make it Count – http://mic.aamt.edu.au

Indigenous learners –
http://connectwith.indigenous.aamt.edu.au
Early Years –
http://connectwith.earlyyears.aamt.edu.au

Connect with Maths –
www.aamt.edu.au/Activities-and-projects/Connect-with-Maths

NATIONAL MATHEMATICS SUMMER SCHOOL

The National Mathematics Summer School (NMSS) is a two week residential school held each year in January for highly gifted mathematics students who have just finished year 11 maths.

It will be held at ANU from January 4th to 17th 2015.

The cost is $1400, but the CMA provides a subsidy of $400 for ACT school students. Further details can be found at

http://nmss.edu.au/index.html

Places for NMSS are highly sought after, with only about 64 students from around Australia selected each year. The ACT sends about 3 students. We have two application forms; one is to be filled in by the nominating teacher, and the other by the student.

Copies of the forms can be found at

http://www.canberramaths.org.au/nmss.html

These should be returned by Friday the 25th of July.

If you have a student who has been accelerated in Maths, please nominate them if they are currently doing year 11 maths, even if they are a year 10 student (or younger). If they are currently doing year 12 maths, are a year 11 student (or younger) and haven't already attended NMSS, please nominate them now. (In future such students should be nominated when they are doing year 11 mathematics.) Non-accelerated year 12 students should not be nominated.

CMA ANNUAL CONFERENCE

The CMA conference this year will be held on Saturday 16 August, from 9:00 to 5:00 at the Australian Catholic University campus, Watson.

The keynote address *Catering for Diversity* will be given by Megan Jackson.

Megan left her Year 11/12 classrooms to go over to the University of Canberra where she joined the Clinical Teaching Specialist team in July 2012. She is a chef by trade, and also has an Arts degree, so her teaching areas cover Home Science, English, History & Political Science. When she isn't teaching, Megan is probably working on her PhD, which is about students with critical and chronic illness, real time 2-way digital communications, and motivation & engagement.

Full details of the many workshops that will run are to be announced soon but among them, to name a few, are *Kissing in the mathematics classroom* by Russell Brown, *Trebuchets* by Jamos McAlester, *Colouring maps on impossible surfaces* with Chris Wetherell, and *G&T in Primary School* by Caroline Evers. (That's *gifted and talented* we think).

The preferred method of registering for the conference is by filling in and e-mailing the registration form available on the CMA website, and paying online, all of which can be done without paper. Paying on the day is also an option.

NEWSLETTER OF THE CANBERRA MATHEMATICAL ASSOCIATION INC

PO Box 3572
Weston ACT 2611
Australia

E-mail: canberramaths@yahoo.com.au

We're on the Web!
http://canberramaths.weebly.com/

ABOUT THE CMA

The Canberra Mathematical Association (Inc.) is the representative body of professional educators of mathematics in Canberra, Australia.
It was established by, among others, the late Professor Bernhard Neumann in 1963. It continues to run - as it began - purely on a volunteer basis.

Its aims include

* the promotion of mathematical education to government through lobbying,
* the development, application and dissemination of mathematical knowledge within Canberra through in-service opportunities, and
* facilitating effective cooperation and collaboration between mathematics teachers and their colleagues in Canberra.

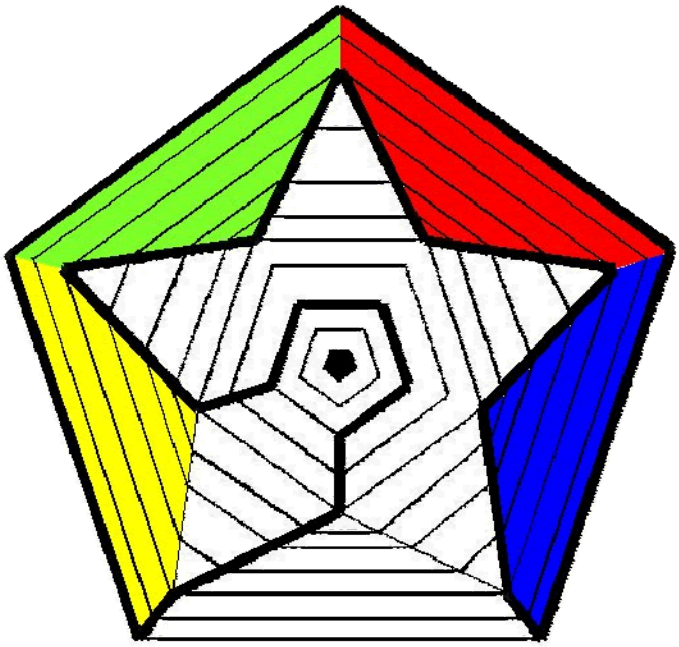
THE 2014 CMA COMMITTEE

President	Bronwyn Welch	CSIRO
Vice Presidents	Erin Gallagher	
	Jurek Paradowski	Telopea Park School
Secretary	Theresa Shellshear	Australian Catholic University
Treasurer	Paul Turner	Erindale College
Councillors	Sue Wilson	Australian Catholic University
	Heather Wardrop	Lake Tuggeranong College
	Andy Wardrop	Erindale College
	Valerie Barker	University of Canberra
	Jo McKenzie	Namadgi School
	Patricia Tandy	Melrose High School
	Peter McIntyre	University of NSW Canberra
	Bruce Ferrington	Radford College Junior School
	Ed Staples	
	Elaine Hooke	
	Michael Klinkert	St Edmund's College
	Caroline Evers	Dickson College
	Gavin Scales	Gungahlin College
	Aruna Williams	Erindale College

Find us on Facebook

http://www.facebook.com/pages/Canberra-Mathematical-Association/110629419011275

Conference



THE CANBERRA MATHEMATICAL ASSOCIATION

CMA 2014 MATHEMATICS CONFERENCE

CATERING FOR DIVERSITY

VENUE: ACU, ANTILL STREET, WATSON
DATE: 16 AUGUST 2014, 9:00 am -5:00 pm

Keynote speaker: Megan Jackson