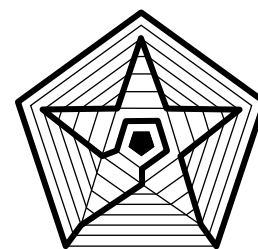


SHORT CIRCUIT



Newsletter of the Canberra Mathematical Association INC

Coming Events:

February 10 *Welcome drinks, ACU, 4:30 pm*

July 11-13 *AAMT conference in Canberra*

August 19 *CMA Conference*

November 8 *AGM & dinner*

Wednesday Workshops:

March 1 (North)

March 8 (South)

May 24 (North)

May 31 (South)

VOLUME 8 NUMBER 1

DECEMBER 2016

MEMBERSHIP

NEWS AND COMMENT

On page four of this edition we list the new CMA council for 2017, appointed at the recent Annual General Meeting. There has been some shuffling of roles, there have been some departures and we welcome Sam Hardwicke of Turner School as a new councillor.

Under development, is a calendar of CMA and related events that should be of assistance in planning. Some dates have been included in the box above but there are more to come.

As well as the Wednesday Workshop series—one each term, plans are under way for several one-off events with high profile speakers, similar to the Charles Lovitt event in 2016.

In 2017, Canberra hosts the Australian Association of Mathematics Teachers conference, 11-13 July.

Registration is now open and offers to present seminars and workshops are being sought. For more information, go to <http://tiny.cc/aamt2017>.

The CMA conference will also run, with unusually attractive rates likely for members and an array of excellent keynote speakers.

At the AGM, awards were presented to some of the new teachers emerging from the University of Canberra and from the Australian Catholic University. CMA welcomes them and all new teachers of mathematics to the profession. Photos: page 3.

Join or renew your membership for calendar year 2017

A membership application form can be accessed from the CMA website:

<http://www.canberramaths.org.au/index.html>

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

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

CMA members may attend conferences of other AAMT affiliates, MAV, MANSW, etc. at member rates.

Note: Receipts for membership and other payments are 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 membership secretary, Paul Turner, or another committee member.

**CANBERRA
MATHEMATICAL
ASSOCIATION**

NZAMT CONFERENCE—BACK TO THE FUTURE

The biennial NZAMT conference in October 2017 is to be held in Christchurch, hosted by the Canterbury Mathematical Association.

There is a call for abstracts on page five of this newsletter.

This link is for the [conference website](#).

AUSTRALIAN RESEARCH ALLIANCE FOR CHILDREN AND YOUTH

From Valerie Barker—

ARACY (based here in Canberra) has a free weekly e-newsletter which often has really interesting links. However, free membership is available only until February 2017. If anyone is interested, it might be worth 'joining' now, (for free).

A link to the website is <https://www.aracy.org.au/>

AAMT—CONNECT WITH MATHS

There are now five *Connect with Maths* online communities teachers can join.

[Make it count with Indigenous Learners](#) community

[Early Years Learning in Mathematics](#) community

[Maths in Action \(Applications and Modelling\)](#) community

[Engaging All Students](#) (Catering for Diversity) community

[Digital technologies for Mathematics](#) community

Subscription to these communities is FREE.

If you would like to join one or more communities, click on the link.

2017 MATHEMATICAL MODELLING CHALLENGE

The 2017 Australian phase of the International Mathematical Modelling Challenge (IMMC) will be held between 14 March and 7 April.

IMMC is an international event established to promote mathematical modelling in school mathematics. The Australian phase will involve teams of up to four students from the same school working collaboratively to solve a problem (set globally) by devising and applying an original mathematical model. The best Australian entries are entered in the international phase with more than 20 countries participating.

For more information, and to see how to register a team from your school, go to the [IMMC Australian website](#).

RESOURCES—WEB

[SageMath](#) is a free open-source mathematics software system .

[Codecademy](#)—Learn to code interactively, for free.

[NetLogo](#) – a computer-based modelling environment that enables learners to both explore and build computer models of natural and social phenomena.

<http://topdrawer.aamt.edu.au> AAMT Top Drawer Teachers website.

www.mathematiciansinschools.edu.au CSIRO Mathematicians in Schools program.

CMA MERCHANDISE

Contact Elaine Hooke on 0407 788 493 or e-mail cmamerchandise@gmail.com for the following items:

Canberra Mathematics Association Navy Polo shirts \$36 with logo, Pi Earrings \$15, Easy as Pi badges and Pi pins \$8.

Free delivery to your ACT school. Elaine can attend your Maths staff meeting.

SHORT CIRCUIT

APTA—AUSTRALIAN PROFESSIONAL TEACHERS ASSOCIATION

APTA is a national umbrella organisation for state joint councils of professional teacher associations. APTA has launched a newsletter—News in Brief which we have appended to the end of this Short Circuit.

STUDENT AWARDS AT AGM



Catherine Noble Valerie Barker Zhe Wang

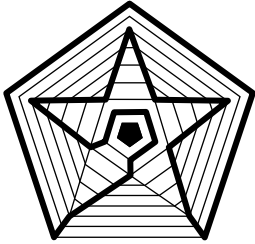


(Bill) Chi Pui Li Sue Wilson Courtney Bonner

Absent: Peter Dortmans

CONTRIBUTE TO SHORT CIRCUIT

Short Circuit welcomes your contributions and your feedback. Communicate with us through the CMA email address: canberramaths@gmail.com



**NEWSLETTER OF THE CANBERRA
MATHEMATICAL ASSOCIATION
INC**

PO Box 3572
Weston ACT 2611
Australia

E-mail: canberramaths@gmail.com

We're on the Web!
<http://www.canberramaths.org.au/>

THE 2017 CMA COMMITTEE

President	Bruce Ferrington
Vice Presidents	Bronwyn Welch Sue Wilson
Secretary	Jo McKenzie
Treasurer	Paul Turner
Councillors	Peter McIntyre Elaine Hooke Valerie Barker Sam Hardwicke Maggie Quigley Theresa Shellshear

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.

Maths by Inquiry
Canberra Grammar School
Australian Catholic University
Namadgi School

University of NSW Canberra

Lyneham High School
Turner School
Kaleen Primary School
Australian Catholic University



Find us on Facebook

Short Circuit is edited by Paul Turner.



Call for Abstracts

The Organising Committee invites you to submit an abstract for the 2017 NZAMT Mathematics Biennial Conference. The committee is looking for presentations which are topical and of interest to conference attendees.

The conference will be showcasing innovative learning and teaching of Mathematics, with examples of best practice and thinking around the current issues in our classrooms. This is a chance for you to share your experiences and knowledge with your peers and we encourage you to submit an abstract.

ABSTRACTS:

The conference theme will have 3 strands

- Blast from the past
- Present Practice
- Preparing for the future

300 word maximum and must include up to three key points and be submitted by **Wednesday 31 May 2017**

Please note, if your abstract is accepted, you will be notified by 31 May 2017

Possible Presentation Ideas:

- BYOD
- Engaging Boys in Mathematics
- Developing Statistical thinking
- Open tasks
- Middle Management and Leadership
- Dialogic Pedagogy
- ILE/MLE in the mathematics classroom
- Putting Grow Mindset in Practice
- Collaborative Practice

Presentation Options:

There are three options to choose from - you can select

- 60 min presentation
- 120 min extended presentation
- to be part of a 3 x 15 Quickfire session. Each presenter will speak for 15 minutes and with 10 mins for Q & A for all three presenters at the end. PowerPoints for each presentation must be the day before.

Registration:

If your abstract is accepted, it is a requirement that you register and pay to attend the conference.

SUBMISSIONS

Please submit abstracts using a link on our website.
www.nzamt2017.com

Abstracts can be up to 300 word maximum

Abstracts must include

- Title
- Brief biography of the presenter(s)
- Presenter's contact details
- Key learning points
- Conference theme best suited to the presentation
- Preferred Presentation Format

IMPORTANT DATES:

Abstracts close:

Wednesday 31 May 2017

Presenters advised of selection:

Friday 16 June 2017

Early Bird Registration for Conference by:

Wednesday 31 May 2017

MORE INFORMATION

If you have any queries, please contact the Organisers:

THE CONFERENCE TEAM

P: 03 359 2614

E: marg@conferenceteam.co.nz

W: www.nzamt2017.com



www.apta.edu.au

News In Brief - November 2016

APTA aims to provide leadership that supports and advances professional teaching associations, by being a voice for, and raising the profile of, the profession by building an informed and supportive network for collaborative activities, projects and research.

President's Message:

Welcome to the first edition of the APTA News. The final term of 2016, commences with World Teachers Day and a range of events that celebrate the achievements of teachers supporting their colleagues.

This has been a busy year as we have tried to affect the policy context to achieve our vision to provide leadership that supports and advances professional teaching associations.

You are invited to participate and influence the shaping of your professional teaching association. Joining and participating in the running of these dynamic communities is a rewarding professional and educational experience.

The 2016 APTAs

This year the APTAs were conferred on Saturday 4 June in Sydney. The Dorothy Hoddinott Medal was conferred on 6 August 2016 in Brisbane. Thank you to the many associations and educators who nominated worthy recipients. Go to <http://www.apta.edu.au/>



Janet Reynolds (left) receiving her Dorothy Hoddinott Medal from Sue Gazis (centre) and Caroline Brooks (right)

The APTAs were supported by our wonderful sponsors Solution Tree and the Australian Catholic University.

Professional Learning Events

It would be worth your while to consider the professional learning offered by Australian professional teaching associations. Check out the APTA professional learning calendar. Have a look at <http://www.apta.edu.au/whats-on/weekly-view?>

Social Ventures Australia – Teaching and Learning Toolkit (Evidence for Learning)

The Teaching and Learning Toolkit is a useful resource for teachers and teaching associations. It synthesises international and Australian research, and presents a wide range of educational interventions, summarised in terms of the average impact on attainment, the strength of the evidence supporting them, and the cost. The Toolkit is updated regularly. Go to the Social Ventures Australia Toolkit

<http://evidenceforlearning.org.au/the-toolkit/>

Asia Education Foundation Curriculum Support

The Asia Education Foundation provides a comprehensive suite of teaching and learning resources across all year levels and subject/learning areas. The support is organised around subject/learning area pages and country pages. Digital resource lists, Australian Curriculum-aligned learning sequences, recommended links, subject associations, illustrations of practice, sample maps, professional learning modules and multimedia are contained within these pages. I recommend you to <http://www.asiaeducation.edu.au/curriculum>

Out-of-field teaching in Australian secondary schools

A new Australian Council for Educational Research (ACER) report, *Out-of-field teaching in Australian secondary schools*, investigates the extent to which Australian secondary school teachers are teaching subjects other than those in which they have specialised. A key attribute of effective teachers is an understanding of the subjects they teach. For more, go to <https://rd.acer.edu.au/article/measuring-the-extent-of-out-of-field-teaching>

OECD's TALIS 2013 – Professional Development

Finally, in this first edition, we have provided you with an update on the OECD's TALIS 2013 working paper *High-Quality Teacher Professional Development and Classroom Teaching Practices: Evidence from TALIS 2013 (OECD Working Paper No 141)*.

I hope you find the first APTA News In Brief informative and of use to you.

Susan Gazis AM
President

Who we are

The Australian Professional Teachers Association (APTA) is a national umbrella body for state joint councils of professional teacher associations. APTA is a not for profit incorporated association governed by a board. Board members are elected from their state joint councils and are responsible for the management of APTA.

Each state and territory joint council represents its professional education member associations. All of these associations are managed and maintained by professional educators.

The eight state and territory joint councils are:

South Australia – CEASA
Council of Education Associations of South Australia
<http://www.ceasa.asn.au>

New South Wales – PTCNSW
Professional Teachers' Council NSW
<http://www.ptc.nsw.edu.au>

Northern Territory – PTANT
Professional Teachers' Association Northern Territory
<http://ptant.com.au/>

Tasmania – NEAT
Network of Education Associations of Tasmania Inc
<http://neattas.edublogs.org/about-us/>

Queensland – JCQTA
Joint Council of Queensland Teachers' Associations
<http://www.jcqta.qld.edu.au>

Victoria – CPTAV
Council of Professional Teaching Associations of Victoria Inc
<http://www.cpta.vic.edu.au>

Western Australia – PTCWA
Professional Teaching Council of Western Australia
<http://www.ptcwa.wa.edu.au>

Australian Capital Territory – COACTEA
Council of ACT Education Associations
<http://coactea.org>

What we do

The purpose of the APTA is to provide leadership that supports and advances professional teaching associations. The purpose of the APTA is to:

- be a voice for, and raise the profile of, the profession;
- build an informed and supportive network for collaborative activities, projects and research;
- be proactive in the development, implementation and review of policy;
- advocate in matters of significance to the profession.

Solution Tree

A major sponsor of APTA in 2017 has been Solution Tree.
<http://www.solution-tree.com.au/event-list/>



Solution Tree partners a wide range of education experts and authors, in delivering professional learning for schools and teachers.

For more than 20 years, Solution Tree has focused on empowering teachers, school and system leaders to raise school and student achievement through a comprehensive range of services and products that include high impact events, school and district solutions for long-term professional development, books, DVDs, online courses, and innovative responsive resources for individualised learning priorities.

For more information, including their catalogue, go to:
<http://www.solution-tree.com.au/about-us/customer-service/catalogues/>



Teachers gathering at the PTANT Festival of Teaching

Festival of Teaching (PTANT)

The Northern Territory Festival of Teaching commenced on Friday 26 August with a reception at Government House, kindly hosted by His Honour the Honourable John Hardy, Administrator of the Northern Territory. The collegial atmosphere set the tone for the conference and attendees appreciated His Honour's remarks about the important role of teachers in the Northern Territory.

The conference program was held on Saturday 27 August and was exceptionally well attended with over 220 delegates from ten professional associations. The key note speakers complimented each other perfectly. Dr Andrew Fuller provided fascinating insights into how the brain operates and highlighted the importance of validating achievement. Mr Eric Frangenheim presented his thinking skills framework that promotes the use of higher order thinking skills.

Delegates had the opportunity to explore these ideas further in workshops with our keynote speakers or to attend a multitude of other options organised and delivered by their professional associations. The success of this event is due to the hard work of the steering committee and the generous sponsorship provided by both PTANT and DoE.

World Teachers' Day Awards (CEASA)

Council of Education Associations of South Australia (CEASA) established these awards in 2006 based on World Teachers Day which is celebrated on October 5th each year.

Each year CEASA holds a World Teachers Day awards ceremony on the last Friday in October to celebrate the contribution made by South Australians to the education profession.

Many of the awards come from CEASA's 57 member associations, along with awards from three major universities, Teachers Registration Board, Ministers Arts Awards, World Education Forum (SA) and Credit Union SA.

CEASA thanks the teachers and educators of all member Associations for their commitment and leadership over 2016 in their work with children, young people and adults.

Thank you to The Minister of Education and Child Development; the Honourable Susan Close and our partner Credit Union SA for their continued support over 2016.

Congratulations to the award winners of the following major awards

Credit Union SA Award – Teacher Supporting Teachers

Brent Bloffwitch - Indonesian Teachers Association of SA
Bronwyn Stacey - Australian Association of Teachers of the Deaf (SA)

Credit Union SA Award – Innovative Association

Geography Teachers' Association of South Australia

Credit Union SA Award – Early Career Teacher

Michael Aquilina - Orff Schulwerk Association of South Australia

University Awards

Flinders University - Emma Aucote
Adelaide University - Alanah Rowe
University of SA - Vera-Ann Marrone

World Education Forum (SA) – Educators Award

Jo Hendriks - Australian Association for Environmental Education

TRB - Induction and Mentoring Early Careers Award

Robyn Carmody - Visual Arts Educators of South Australia

Ministers Arts Award - Primary

Natalie Castree

Ministers Arts Award - Secondary

Tony Jeffrey



Bronwyn Stacey - Winner of the World Education Forum (SA) Educators Award, CEASA/CUSA Teachers Supporting Teachers Award and the Service to AATD (Australian Association for Teachers of the Deaf)

(OECD Working Paper No 141)

http://www.oecd-ilibrary.org/education/high-quality-teacher-professional-development-and-classroom-teaching-practices_5jlpzsw26rvd-en

A new OECD working paper, *High-Quality Teacher Professional Development and Classroom Teaching Practices: Evidence from TALIS 2013* examines the relationship between important features of professional development and effective teaching practices across 35 countries that participated in TALIS 2013. See <http://www.oecd.org/edu/school/talis.htm>

Research has shown that the quality of professional development makes the difference, not its availability. The paper suggests that a global monitoring of the support given to teachers could measure the quality of teacher professional development as a key indicator of progress.

Certain features of teacher professional development assist in the adoption of quality teaching practices. The findings also show that a combination of characteristics create quality professional development that was positively associated with the strategies carried out by teachers to improve students' learning. Features creating quality professional development incorporate:

- an active learning approach
- promotes collaboration between teachers
- teachers from the same school
- is carried out over the long term
- and is curriculum focused.

The results indicate that the higher the exposure of teachers to high-quality professional development, the greater the chance they report using a wide variety of teaching practices in the classroom.

This paper suggests the following policies be considered for teacher professional development:

- encouraging teachers' engagement in curriculum-focused and collaborative learning activities or research with other teachers
- developing strategies to monitor its quality whilst ensuring national standards and assurance procedures
- removing barriers due to gender or other factors identified at the national or local level (e.g. ethnicity, types of schools, etc.)
- ensuring that teachers who have not completed initial training are also exposed to high-quality support in this area.

Resources from national agencies

Check out AITSL's Teacher Toolkit, which allows you to access online tools and resources. <http://www.toolkit.aitsl.edu.au/>

Curriculum resources developed by the Asia Education Foundation in conjunction with national subject associations can be found at <http://www.asiaeducation.edu.au/about-aeaf>

The National Digital Resources available through ESA's Scootle can be accessed at <http://www.scootle.edu.au/ec/p/home>

Professional Learning Events Offered By Professional Teaching Associations

Associations across the country offer a range of professional learning that supports teachers across the country.

Check out the APTA professional learning calendar to look at the activities on offer by professional teaching associations.

<http://www.apta.edu.au/whats-on/weekly-view>

Membership

To become a member of APTA, join one of our member associations in your state or territory:

Communication

APTA provides timely information to members via:

Website <http://www.apta.edu.au/>

Facebook <https://www.facebook.com/apta.edu.au>

Email list Subscribe to the national email list [here](#)

For further information, please contact:

Sue Gazis president@apta.edu.au