



THE MATHEMATICAL
ASSOCIATION OF VICTORIA



**THE MATHEMATICAL
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ANNUAL REPORT 2016-2017**

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VALUING MATHEMATICS IN SOCIETY

**THE MAV IS A MEMBERSHIP DRIVEN ASSOCIATION
WHICH PROVIDES A VOICE, LEADERSHIP AND
PROFESSIONAL SUPPORT FOR MATHEMATICAL
EDUCATION.**

PRESIDENT'S REPORT - JIM SPITHILL



It has been my privilege to be President of The MAV for the last two years, during a period that has exemplified the notion that 'the one constant is change'. A book about the history of mathematics education in England has this 1581 quotation from Richard Mulcaster: 'The Mathematical Sciences ... show themselves in many professions and trades ... whereby it is well

seen that they are really profitable; they do not make an outward show, but our daily life benefits greatly by them'. And this sentiment persists today, but with perhaps a wider recognition of the importance of mathematics as the foundation of the post-industrial, technological era. This throws into sharp focus the importance of the day-to-day endeavours of MAV members in preparing students for the uncertainties that await them, and the importance of the work of The MAV in supporting the endeavours of teachers.

Towards the end of 2016 the release of the latest PISA, TIMSS and NAPLAN data again generated much media attention. Victorian students more than held onto their prominent standing relative to other Australian jurisdictions. There is ongoing concern about the gap in performance by students in regional, indigenous and low SES classifications within Victoria. The MAV is seeking to reach out to these areas of need in its future planning. By international comparison the Australian results showed a slide in the national ranking, as a number of countries have improved their performance while Australia's has tended to level out. At a national policy level there is an evident need to address inequality of opportunity; by reducing the length of the tail we can improve the overall ranking. And more importantly, increase the quality of the lives of our students. This is why it is so heartening to see the strong uptake of professional learning opportunities that are made available through The MAV. The MAV Education Consultants are highly committed and professional in their planning and delivery of PD, and are quick to identify new areas of activity.

At this time last year The MAV was setting out to find a new CEO, following the retirement of Simon Pryor. Council adopted an ambitious position description and advertised beyond the traditional education sector. After a thorough recruitment process Peter Saffin took up the CEO position on 1 September 2016. There was a hand-over period to Peter from Sally Turnbull, and we thank Sally for being Acting CEO and keeping The MAV in good shape from February to August last year. Peter was a science teacher who moved across to the educational publishing sector where he held significant management roles. He brings to The MAV his passion for education, his capacity for quickly mastering a

brief, his clear sense of the opportunities and constraints around The MAV's work, and an eye for detail that makes a small business run smoothly and profitably. He led the discussion at the Council Planning Day in October, from which has emerged the outline for the 2018–2021 Strategic Plan, its implementation will shape his work at The MAV.

In December, a large number of The MAV Councillors and representatives from AAMT Affiliates attended a training day on governance organised by AAMT. It was a valuable opportunity to grapple with the scenarios put before us. It is evident that the challenges are much the same across the nation, and that there is a great reservoir of goodwill amongst the leaders of the profession. It is also evident that The MAV is fortunate to have its infrastructure and paid officers, compared with other locations which rely largely on the work of volunteers. It is appropriate to acknowledge and applaud the work of previous generations of The MAV in bringing us to this relatively fortunate position. The AAMT, under its President, Allason McNamara, is itself finalising a strategic plan, one of its key goals will be strengthening ties with and across its Affiliates. There are important AAMT projects that will come to fruition in the next year or so, such as the *ReSolve: Maths by Inquiry* project with the Australian Academy of Science that will deliver proven materials for the classroom, and the *Dimensions Portal* as a common resource for high quality teacher professional learning.

In December, it was my privilege to confer Life Membership of The MAV to two outstanding recipients. Doug Williams, for his development of innovative approaches and resources for the classroom, and Simon Pryor, for his consolidation of the structural and administrative affairs of The MAV. Both have made significant and enduring contributions to mathematics education in Victoria.

I thank the members of The MAV Council, 2016–2017 for their diligence and wise counsel. Three members of the Council have reached the end of their 5-year terms: Elizabeth Burns, June Penney and Max Stephens. Marj Horne will end her term as Immediate Past President, since I will be standing aside from the President position I will be fulfilling this role. It will be the first time in many years that Council meetings will be without recourse to the institutional knowledge and professional wisdom of these stalwarts of The MAV.

As The MAV looks ahead to 2018 and beyond, it's clear that challenges await. Some are well known and a bit daunting, such as maintaining a highly professional teaching workforce in an era of rapid growth in the school age population set against an ageing demographic in the teacher cohort. Some are unpredictable, such as the direction of policy agendas at the political level. Mathematics has been responding to such challenges for centuries, and The MAV stands ready to face up to them yet again, thanks to the passion and dedication of the mathematics education community.

CEO'S REPORT - PETER SAFFIN



I joined The MAV as CEO in September 2016 after being impressed by the recruitment process, including the professional way in which I was treated. It has been a pleasure since that time to have worked with so many dedicated Council members and staff. I would particularly like to thank James Spithill, President, for making me

so welcome, and empowering me to make change and progress The MAV's ambitions. I was also provided with a professional and detailed handover from the Acting CEO, Sally Turnbull, who has been most supportive.

This generous welcome is indicative of The MAV. With a career dedicated to education I have found the role of CEO at The MAV a perfect balance of business skills and education focused activities. Consequently, I am excited about the opportunity to continue taking The MAV forward.

The MAV has come out of a tough couple of years financially, and it was pleasing to see a return to surplus in 2016. A number of factors contributed to this, including funding for various projects, a successful annual conference, and an excellent year for the VCE Professional Development program as a result of the introduction of the revised VCE mathematics curriculum. There were also significant cost savings across most areas of the operation. Despite this it is essential for The MAV to create a long term sustainable approach to running all programs. During the 2017 budget development I have undertaken a review of The MAV's activities and we are now budgeting for each event and program to ensure they hold their own. There are also great opportunities to bring efficiencies to the processes and services through new technologies and upgrades to systems. Various projects are already underway to ensure The MAV is a thriving, modern and up-to-date association. With improved systems, The MAV can deliver better service, and focus on what really makes a difference to our members.

There are also many opportunities for The MAV to explore further. As a small association it is important for The MAV to prioritise its focus, and to utilize all tools at its disposal to achieve success. I firmly believe that partnerships are going to be a central part of future success. Partnerships potentially bring funding to help sustain The MAV, but more importantly provide a host of mutual benefits to members including access to expertise, and scale to activities that may otherwise not be achieved by The MAV alone.

I would like to thank our key partners for 2016 including our annual sponsors: Cambridge University Publishing, Casio Education and Texas Instruments; and also the Victorian

Department of Education and Training (DET) who funded The MAV to develop materials for and to support the implementation of the Victorian Maths Challenge. The MAV are supporting this project further in 2017. The MAV is also funded by the DET as a member of the Strategic Partnership Program. This has allowed The MAV to expand its services, including the very successful maths camps for gifted and talented regional students. In 2016 the camps were supported by industry partners; Reserve Bank Australia, DOWNER EDI, IBM, Ford, ACER, CSIRO, and The Gene Technology Access Centre (GTAC). I would like to thank them also for their support. The MAV also worked with the Victorian Responsible Gambling Foundation to provide resources for the VCAL curriculum. These resources provide a means by which teachers can deliver and develop numeracy, while tackling the important social issue of responsible gambling.

Many of these partners are engaged with The MAV again in 2017, and many new partnerships are now underway or being investigated. It will be exciting to announce new initiatives and partnerships as we proceed through the year.

I hope that you can see how all of things I have mentioned tie into The MAV's Core Statement of 'Valuing Mathematics in Society', and the Mission Statement: The MAV is a membership driven association which provides a voice, leadership and professional support for mathematical education.

We have much work to do though until we can say that mathematics is valued in society. There is still a perception in society that mathematics is hard, that it can't be done, or that it is not important. This permeates from many who found mathematics that way at school, perhaps taught by 'old school' approaches. Parents of this era often perpetuate the same ideas in their children. As mathematics educators we know this is not the case, and that we can make mathematics interesting and engaging, and bring in real life applications to the teaching and learning of concepts. The focus on mindsets currently is also helping to shift things along. We must persist with this valuable work and educate the wider community about the importance and richness of mathematics in the world around us. This is crucial for the future success of our economy and society in a changing world.

With The MAV's core statement and vision front of mind we can continue to support mathematics educators, The MAV members, and to create a host of positive outcomes for our members and society as a whole.

MAV PERSONNEL - 2016

Chief Executive Officer	Peter Saffin (from September 2016)
Acting Chief Executive Officer	Sally Turnbull (from March to August 2016)
Former Chief Executive Officer	Simon Pryor (until March 2016)
Mathematics Education Consultants	Jennifer Bowden (Primary) Ellen Corovic (Primary) Helen Haralambous (Secondary) Ann Kilpatrick (Secondary) (from April 2017)
Community Manager	Renee Hoareau (until February 2017)
Membership Officer	Michael Green
Finance Officer	Zofia Wiacek
Administration Assistant	Darinka Rob
Events Manager	Jacqui Diamond (from November 2016)
Former Events Manager	Julie Allen, The Full Pretzel (until December 2016)
Marketing and Sponsorship	Louise Gray, Stitch Marketing

In addition to the staff, the Council and staff would like to thank all contracted consultants and the generous volunteers that have supported The MAV in delivering its program and services. There are too many to name here, but your support is greatly appreciated.



Mathematics Education Consultant, Ellen Corovic, mentors teachers at an in-school PD session.

MEMBERSHIP, MARKETING AND COMMUNICATIONS

COMMITTEE MEMBERS

Max Stephens (Convenor), Jim Spithill, Trish Jelbart, Jamie Gray, Rhys Coulson, Peter Saffin, CEO (Executive Officer), Ellen Corovic (Program Manager, Maths Active Schools)

MEMBERSHIP

KEY ACHIEVEMENTS

- Membership maintained approximately at previous year levels in all categories
- Stabilisation of membership after two prior years of decline in 2013 and 2014
- Increase in individual memberships over past 4 years seems to have stabilised in 2016
- Expansion into non-traditional membership areas is beginning.

	2013	2014	2015	2016
INDIVIDUAL MEMBERS	450	454	523	514
Associate members	36	33	27	29
Early childhood centres	0	0	9	9
P-12 schools	138	145	137	135
Secondary schools	328	319	310	315
Primary schools	487	458	376	382
INSTITUTIONAL MEMBERS	989	955	859	870
TOTAL	1439	1409	1382	1384

The MAV has agreed to deliver a joint conference in June 2017 with Melbourne Graduate School of Education's Mathematics Education Group (MEG). This initiative will provide a direct opportunity for engagement with existing and potential primary school members. It will allow MAV to expand its services to primary schools, their teachers and leaders. We hope that some of the work done for this event will also be used to engage with regional primary schools delivering further professional development opportunities and engagement with potential members.

Through such partnerships, The MAV plans to expand its member services and reach into other areas. Opportunities abound at the moment, and The MAV must seize those that are appropriate.

At its 2016 Annual Conference, The MAV saluted the outstanding contributions to the Association and to mathematics education more generally of Simon Pryor, its recently retired Executive Officer after more than 13 years

in that position, and of Douglas Williams who as a former teacher and The MAV President, had been instrumental in developing services and publications for The MAV's primary school members. Doug's work continues to be valued by teachers throughout Australia and beyond through his Mathematics Task Centre and through Maths 300.

COMMUNICATIONS

KEY ACHIEVEMENTS

- MAVlist newsletters re-designed into a professional format and targeted at different segments, such as *Professional Learning news*, to make accessing information easier.
- *MAV Guide* produced for the first time at the 2016 conference, and enhanced for use throughout the year in promoting The MAV services to members and possible partners.
- Website redesign underway including revised navigation, design and conference pages.
- The MAV logo revised in new colours, creating a more contemporary look for the next few years.
- Communications focussing on how The MAV provides value to members.

Since the third quarter of 2017, significant work has been done in looking at and improving how The MAV presents itself and communicates to members, potential sponsors and partners, and the community at large. Upgrades across MAVlist communications, the website, the new *MAV guide*, and new materials for sponsors have all received very positive feedback from members and others. Further work is planned for The MAV website including a partners and sponsors page, where we can demonstrate the impacts we are having through various projects and partnerships. The MAV expects that this will breed further interest in The MAV's activities at this exciting phase in its development. It is pleasing to see The MAV looking like a modern progressive organisation and making the most of the communication tools at its disposal.

Various other new communication strategies are also being investigated, including for example the production of a discussion paper alongside the next strategic plan. This paper will focus on some key issues of concern for members in mathematics education, and raise questions and possible directions for the future. This will enable The MAV to engage in discussion on these matters with various potential partners, government and other organisations.

The development of a new conference website is particularly pleasing, and will help ensure the future of this great event. The website will ensure a better informed member base and conference community, and allow The MAV to showcase more appropriately its partners, and sponsors.



Derrimut Primary School receives its Mathematics Active School Accreditation from The MAV CEO, Peter Saffin.

MATHS ACTIVE SCHOOLS (MAS)

KEY ACHIEVEMENTS

- Four new Maths Active Schools accredited in 2016
- A total of 25 Maths Active Schools
- Successful first whole day *Learn. Lead. Live.* event showcasing MAS and providing a networking opportunity
- MAS resource kits developed for primary and secondary schools twice yearly.

The MAV's Maths Active Schools initiative is a way to recognise and support schools who demonstrate effective learning and teaching practices in mathematics. During 2016 four new schools were accredited: Derrimut Primary School, Mackellar Primary School, Melbourne Girls Grammar School Morris Hall (Junior Campus) and St Mary's Williamstown.

It has been great to see the variety of approaches being taken by these schools as they work towards excellence in mathematics education, and lead the way as a lighthouse school that others can draw experience from. Maths Active Schools showcase excellence in mathematics learning across the entire school community, from leadership, to classroom and to the school community. This program was particularly successful in 2016 and will continue to grow in 2017 and beyond as its status rises within The MAV member base.

During 2016 MAV facilitated network meetings for Maths Active Schools, PD days and events, and provided resources for the schools to share with the school community. Also, various staff from these schools act as consultants for The MAV based activities such as PD, due to their expertise in certain areas and mathematics leadership ability. The MAV intends to support these schools further in 2017 and ensure a highly engaging program of events for the future.

Dear Maths Educators,

MAV have had a great start to the year! I would like to mention just some of the achievements MAV has already made this year in support of members:

- 6 VCE workshops in metro and regional centers with attendance of over 660 teachers from across the state
- 3 MAV workshops for year K to 10 teachers with attendance of 66 teachers
- 4 MAV Maths Talent Quest events have been run in Hobart and Melbourne with over 60 teachers attending. We look forward to new schools joining this great program
- Accredited 4 new Mathematics Active Schools: Mackellar Primary School and presented their plaque at a school assembly (see photo of myself with Fiona Clarke)
- Our Education Consultants have begun working at schools already spending over 12 days directly supporting maths and numeracy programs
- Presided for the annual Maths Camps for gifted and talented students from regional schools, engaging with our industry partners and preparing some very exciting projects for students
- MAV consultants are also working on some fantastic new projects with the DET to further our work on the Victorian Maths Challenge
- Planning our MAVlist Annual conference. We have already confirmed our theme and two excellent key notes. Stay tuned as we launch our conference very soon
- Launched our first Girls in STEM event on International Women's Day (see below for more information)

As an appreciated MAV member, we plan to bring you exclusive special offers throughout the year. We are talking to various partners and providers about what we can do to support you. See below for an exclusive March special offer for cooling PD.

Regards,
Peter Saffin
CEO, Mathematical Association of Victoria

Professional Learning
We recently sent out our Professional Learning newsletter for March.
For primary teachers we are especially looking forward to the Picture Book session!
[Click here](#) for our latest Professional Learning newsletter.

Your MAV CEO presenting at FutureSchools Expo
Your MAV CEO, Peter Saffin will be presenting a session and chairing a panel discussion at the National FutureSchools Expo 2017 running from 23 - 24 March 2017. The sessions are as follows:
Thursday, 23 March 2017 in the Exhibition Hall from 2:30 pm - 2:50 pm on the topic of "Success in tertiary education requires Maths!" Co-presented with Trish Jarbat.

MAVlist, one of The MAV's primary communication tools has been redesigned with a fresh look. The content is pushed electronically to teachers on a regular basis.

PROFESSIONAL DEVELOPMENT



Mathematics Education Consultant, Jen Bowden, engages with teachers at a professional development workshop.

COMMITTEE MEMBERS

Elizabeth Burns (Convenor), June Penney, Michaela Epstein, Ollie Lovell, Francis Sidari, Renée Hoareau, Jennifer Palisse, Duncan Symons, Kerryn Driscoll, Trish Jelbart, Helen Haralambous (Executive Officer)

IN SCHOOL PROFESSIONAL DEVELOPMENT

KEY ACHIEVEMENTS

- 5 workshops with an early years (F – 2) focus, 25 participants
- 36 workshops with a primary focus, 1897 participants
- 2 workshops with a middle years focus, 40 participants
- 2 workshops with an F – 10 focus, 67 participants
- 13 workshops with a secondary (7 – 10) focus, 267 participants

Throughout 2016, The MAV education consultants (MECs) were contracted to run professional learning workshops in a number of schools, at all levels, from all sectors and from all regions.

The MAV primary MECs were contracted to present Family Maths Nights to eight schools with a total of 1107 attendees. The MAV secondary MECs were contracted to present a regional Maths Games Day in Gippsland and an end of year program Maths Games Day. These two events had a total of 305 student participants.

Of the 56 contracted events, seven were to independent schools, five to catholic schools and 44 to government schools. The 56 events by region were as follows:

- 8 North East region
- 11 North West region
- 15 South East region
- 22 South West region.

GENERAL PROFESSIONAL DEVELOPMENT

KEY ACHIEVEMENTS

At Cliveden, The MAV MECs delivered on a variety of topics, including:

- What's the story (TEAMP) (primary)
- Effective planning using online resources – Scootle (primary)
- Games: just trivial pursuits? (primary)
- Working mathematically in the early years (primary)
- LEGO: readdressing mathematical misconceptions (primary)
- Maths 300 primary workshop (primary)
- Improving fluency across mathematics (primary)
- Improving fluency across mathematics (Tasmania) (primary)
- Working mathematically through collaboration – clue cards and investigations (primary)

- Connecting with maths through the body, hand and mind (primary)
- Open ended questions and rich tasks (primary)
- Early maths leaders (primary)
- Waging war on worksheets? (primary)
- Tune me in: short sharp maths warm-ups to get your lessons rolling (primary)
- Using rich tasks and open-ended questions to develop mathematical proficiency (primary)
- Tips for hosting a family maths night (F – 10)
- Maths active schools: NAO robots (F – 10)
- Maths active school in action: Lumen Christi Catholic College (F – 10)
- MTQ workshops (F – 12)
- Maths 300 secondary workshop (secondary)
- Fractions and decimals (secondary)
- Algebra workshop (secondary)
- Biggest loser: responsible gambling for Years 9 and 10 (secondary)

Several of the above were repeated due to their popularity.

Also at Cliveden external consultants presented a variety of workshops, including:

- Education Perfect proficiency week workshop (secondary)
- Engaging maths games to build skills, confidence and higher order thinking with the think square (F – 10)
- Ideas for teaching place value (F – 4)

The following whole day PD Days were held, with a variety of workshops:

- Regional Conference Moe – (F – 10) Keynote Paul Swan, variety of workshops from MECs
- Learn. Live. Lead. - a maths active schools event (F – 10), Keynote (big ideas) Dave Tout, Jim Spithill
- Ian Lowe presented a series of whole day workshops entitled 'Making confident mathematics teachers' for junior secondary mathematics teachers

The Moe regional conference was a first for The MAV and due to its success, The MAV is planning a series of regional events for F – 10 teachers of mathematics in various regions across the state. Likewise, the popular series, Making Confident Mathematics Teachers, for junior secondary mathematics teachers, is being repeated in 2017.

VCE PROFESSIONAL DEVELOPMENT

KEY ACHIEVEMENTS

Three whole day VCE PD days

- University of Melbourne
- La Trobe University, Bendigo
- Federation University, Gippsland

Four after school SAC workshops

- Terang
- Thornbury
- Ballarat
- Burwood

Six after school Meet the Assessors workshops

- Geelong
- Horsham
- Williamstown
- Burwood
- Wangaratta
- Terang

The VCE PD series was very successful in 2016, with whole-day workshops again being offered, along with the after school Meet the Assessors and SAC Workshops. These were offered in all four DET regions along with metropolitan workshops again offered in all four metro regions.

Terang was a new regional location for 2016, instigated by the MECs assisting the region in setting up a maths network at the end of 2015, with Ellen Corovic and Helen Haralambous presenting a whole day Maths PD program as the inaugural network event. Thornbury was the location for a new metropolitan event for 2016, based on member feedback to host an event in the Northern metro region as Northcote which had previously hosted events was no longer able to do so. Also for the first time, The MAV was able to offer after school Specialist Maths workshops in regional Victoria, at Horsham, Wangaratta and Terang.

As stated above the VCE PD series of workshops was very successful for The MAV, being in high demand from members and non-members, mainly due to the fact that 2016 was the first year of the Revised VCE Study Design, following on from a study design that had been in place for ten years.

It has been a very successful year for The MAV's professional development program. The committee would like to applaud the work of all the staff at The MAV, and in particular, the work of the Executive Officer assigned to this portfolio, Helen Haralambous who has worked tirelessly for the committee.

STUDENT ACTIVITIES

COMMITTEE MEMBERS

Frances Sidari (Convenor), June Penney, Allason McNamara, Jamie Gray, Trevor Fauré, Jen Bowden (Executive Officer)

MATHS TALENT QUEST

KEY ACHIEVEMENTS

- In 2016 there were 593 entries from 59 schools, an increase from 2015.
- The new MTQ judging rubric was used, gaining positive feedback from both teachers in schools and the Victorian MTQ State Judges
- The MAV presented an MTQ workshop in Tasmania. Three Tasmanian schools entered the Victorian Maths Talent Quest
- National MTQ Judging and Awards ceremony was hosted by The MAV. Judges travelled from interstate to take part in the process, making for a collaborative process across Australian states
- Both South Australia and Western Australia now feel empowered to complete their own state level MTQ judging



An MTQ entry.

The Maths Talent Quest (MTQ) is an integral component of the student activities program. The program caters for student diversity when investigating mathematical topics and connecting them to the real world. The MTQ enables and empowers each participant to use a variety

of techniques in their investigation, which enhance personal skills in communicating mathematical concepts to the wider community, be it through essay, innovative investigations presented online, or by embracing emerging technologies, such as coding. The MTQ has successfully had an increase of participants each consecutive year, with 593 entries from 59 schools in 2016, the largest number to date.

The MTQ welcomed schools from other Australian states and overseas not already running a statewide competition to enter the Victorian competition. As an inclusive process, Jen Bowden travelled to Launceston to support Tasmanian teachers in developing their understanding of the MTQ. This successful event resulted in three Tasmania schools entering the MTQ. Western Australia and South Australia have participated in the MTQ for a number of years and we are pleased to announce that in 2017 both Western Australia and South Australia will host their own competitions, which is a testimony to The MAV's support to the leading stakeholders

in each of these states. All of The MAV education consultants and volunteers continue to support schools as they begin to participate in the MTQ.

In the judging process, a rubric is used and students use this rubric to guide their investigations. The MTQ committee incorporated an updated rubric to enable the MTQ judging to be more effective and reflective of the current 2017 Victorian Curriculum, focusing on the proficiencies and highlighting those investigations that focus on a mathematical process. Positive rubric reviews were received from all those involved, including the majority of judges.

In 2016 The MAV successfully hosted the National Maths Awards, as it has over the past few years. The National judging took place at The MAV with representation from 5 states (Western Australia, South Australia, New South Wales, Tasmania and Victoria). This was a very successful process, ensuring Australia wide networking and collaboration.

The student activities committee is very grateful to the academics, teachers, and volunteers who support the MTQ through a commitment to the judging process.

The MAV would also like to thank La Trobe University Bundoora for their support in hosting the State judging and National Awards Ceremony.

VCE REVISION LECTURES

KEY ACHIEVEMENTS

- Lectures were held in all four regional areas and three metropolitan locations. (Warrnambool, Horsham, Wangaratta, Sale, Glen Waverley, Caroline Springs, Mt Eliza)
- Mt Eliza was a new location in 2016 based on feedback from the VCE Careers Expo.
- Increase in student attendance from 2015 to 2016 due to the revised study design and several schools using Gonski funding to pay for students to attend
- Quality of the revision booklets provided to students was improved

The VCE Revision Lectures provide the opportunity for VCE students to have extra preparation leading into the VCE Mathematics exams (Further Mathematics, Mathematical Methods and Specialist Mathematics). These sessions were presented by highly experienced and enthusiastic teachers all of whom have VCAA assessing experience. The series of lectures was conducted in September/October 2016 at the following locations:

- Warrnambool
- Horsham
- Wangaratta

- Sale
- Glen Waverley
- Caroline Springs
- Mt Eliza

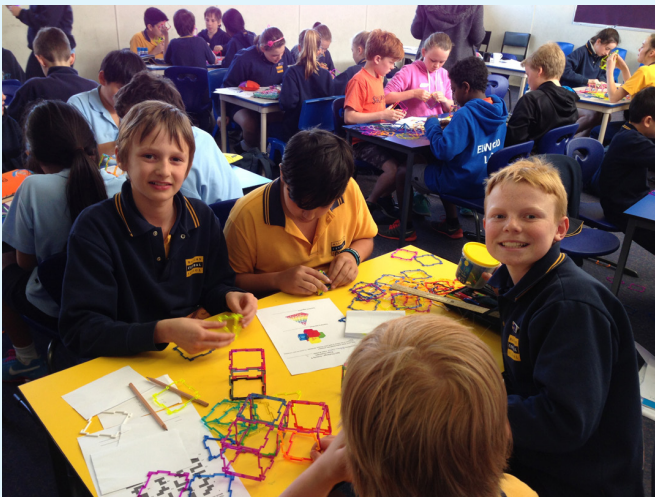
Registrations were higher than previous years, with many events reaching capacity. The revised Study Design was a major factor in increasing student demand to attend the lectures, and in some cases, schools utilised Gonski funding to allow their students to attend. The lectures were well-attended with 1,000 students participating statewide, and feedback on presenters content and booklet presentation was very favourable.

MATHS GAMES DAYS/FAMILY MATHS

KEY ACHIEVEMENTS

- 11 Games days across the state including Gippsland Games Day
- Ten Family Maths Nights across Victorian schools
- Development of whole school primary maths days that have been hosted by The MAV education consultants.

Maths Games Days



Maths Games Days are an opportunity for students to develop their mathematical talents and thinking skills in a setting where mathematics is regarded as worthwhile and enjoyable with like-minded students from a diverse range of schools. It is an ideal way for students to participate in mathematical activities without the usual classroom pressures and is a very effective vehicle for getting young people – particularly in the middle years of schooling – excited about maths.

The state-wide Games Days continue to gain full registrations with interest from across Melbourne, and close

to 1150 attendees at the eleven events in 2016. This year included a Games Day in Gippsland. The MAV education consultants have been collaborating with schools to ensure the registration, sponsorship, planning and implementation processes are streamlined, enabling schools to be well supported whilst still maintaining autonomy.

Games days host schools

- Lowther Hall Anglican Grammar School
- Penleigh and Essendon Grammar School, Essendon and Keilor campuses
- Genazzano FCJ College
- Lumen Christi Primary School
- Mt Hira College
- Overnewton Anglican Community College
- Williamstown High School
- Mt Scopus Memorial College
- Camberwell Grammar School

Special thanks go to the hosting schools, school coordinators, the many teachers involved and the local commercial sponsors.

Family Maths Nights

During 2016, Education Consultants and contractors hosted ten Family Maths Nights across the state. The Maths Nights provided a great opportunity for families to participate in enjoyable mathematical activities whilst understanding pedagogies of teaching and learning across schools.

Family Maths Night host schools

- Red Cliffs Primary School
- Black Rock Primary School
- Cheltenham Primary School
- Werribee Primary School
- Yarraville West Primary School
- Balnarring Primary School
- Ringwood Heights Primary School
- Moonee Ponds Primary School
- Beth Rivkah Ladies College
- Holy Saviour School

At two of these events activities commenced within the school day, allowing students to engage in activities before their families joined them for the evening session. These days were held in collaboration with Cam Lee from Green Hats Planks. These whole day sessions have been such a great success that they will be expanded in 2017 into additional schools.



MAV have produced a downloadable PDF resource which empowers teachers in schools to run family maths nights independently. This resource is sold via The MAV's online shop, <http://shop.mav.vic.edu.au>.

ANNUAL CONFERENCE



A keynote session at The MAV's 2016 annual conference.

COMMITTEE MEMBERS

Ann Downton (Convenor), Julie Allen (The Full Pretzel), Trish Jelbart, Frances Sidari, Leigh Thompson, Leicha Bragg

KEY ACHIEVEMENTS

- Initiating an alternative format to previous years of running concurrent keynotes on each day and not having an Anniversary lecture or closing ceremony
- Providing 16 high quality keynote speakers from a range of sectors across the two days
- Producing the conference proceedings online
- Reaching our budgeted profit

The 2016 Annual Conference *Maths Explosion* was a success overall. There were 1399 attendees in total including delegates, speakers, presenters, The MAV staff and volunteers, which was slightly lower than previous years. This included 70 interstate and 22 international delegates, which was pleasing.

Once again The MAV was privileged to have a wide variety of presentations for delegates to attend and it was exciting to see a number of people make their inaugural presentation at the conference. There were 396 sessions offered over the two days, which was lower than previous years, although not surprising given the lower attendance numbers. The conference saw a rise in the number of presentations relating to STEM and the committee made a conscious decision to cater for interest in this area through some keynote speakers.

As the result of a review of the 2015 conference, new initiatives for the 2016 event included: removing the anniversary lecture (which was well attended but venue size and technical issues needed to be addressed) and closing ceremony (which had dwindling numbers in previous years), and to place greater emphasis on keynote presentations (which had been poorly attended). Eight keynotes were offered concurrently as the first session on each day.

We were keen to ensure keynote offerings across all sectors from early years through to VCE, and embarked on sourcing key people with expertise in these areas from across Australia. There were five interstate keynote speakers this year, a first for the conference.

The early years and primary keynote speakers included: Professor Janette Bobis (early mathematics learning through drawing, gesturing and talking); Professor Doug Clarke (practices of effective teachers of mathematics); Associate Professor Ann Gervasoni (ways to ignite mathematics learning for disadvantaged children); Dr Tracey Muir (planning for and capitalizing on teachable moments in the classroom); Professor Joanne Mulligan (connecting mathematics learning); Matt Sexton (mathematics of hope: inspiring teachers and our future mathematicians); and Rob Vingerhoets (teacher confidence). Years 7 to 12 keynotes included Dr Jill Brown (digital technologies transforming the teaching and learning of mathematics); Dr Derek Hurrell (student perceptions of mathematics); Yvonne Reilly, Jodie Parsons, Thao Huynh (mathematics pedagogy that support STEM programs); Dr Russell Tytler (STEM focus);



The exhibition space at The MAV's 2016 annual conference.

and Dr Gaye Williams (the problem-solving classroom). Four keynotes addressed topics and issues applicable for Foundation to Year 12. These included: catering for students with mathematics learning difficulties (Dr Rhonda Faragher); teaching mathematics utilising YouTube (Burkard Polster); the current state of mathematics education (Marty Ross); and worded problems (Dr Paul Swan).

We were delighted to have teachers, Yvonne Reilly, Jodie Parsons and Thao Huynh, from Sunshine Secondary College, the recipient of the Victorian Outstanding School Achievement Award present a keynote.

The feedback from delegates about the change in keynote structure was positive. Some indicated that it was hard to decide which keynote to attend, while others suggested repeating them on the following day.

Two other changes initiated this year were production of the conference proceedings online as a cost saving measure and offering an early bird registration rate, which was only taken up by a small number of delegates. Both initiatives will be continued in 2017.

The conference proceedings was edited by the team at Deakin University whose work was outstanding. We had 23 papers published in the proceedings. My thanks to the editors: Wanty Widjaja, Esther Yook-Kin Loong and Leicha Bragg; and the volunteer reviewers.

In summary, The MAV 2016 Annual Conference was successful overall despite attendance being down on the previous year.

The budget surplus outcome of approximately \$185,000 profit was in line with the projected target. This was largely achieved by some stringent cost cutting measures throughout the year, required due to lower attendance. The conference was also successful in terms of how well the new initiatives were received by the delegates. Thanks go to The Full Pretzel, The MAV staff and to all speakers who committed their time, energy and expertise to presenting such high quality, thought provoking sessions. Finally, thank you to the committee for their work and their expertise throughout the year and to Council in supporting the committee and the initiatives introduced this year.

A special thank you goes to Julie Allen of the Full Pretzel who completed her last conference with The MAV as our contracted events manager. Julie has done a fantastic job over many years in delivering The MAV conferences and her dedication and support is much appreciated.

PUBLICATIONS

COMMITTEE MEMBERS

Roger Walter, Louise Gray, June Penney, Trish Jelbart, Terence Mills, Ellen Corovic, Sarah Ferguson

JOURNALS

KEY ACHIEVEMENTS

- Over 2016/2017, articles in The MAV's journals have had an increased focus on Victorian Curriculum outcomes
- Submissions for articles have been received from a broad cross section of The MAV membership, including some WA based contributors
- Increasingly teachers are submitting articles to The MAV journals to further their professional standing and career development.



In 2016 – 2017 The MAV continued to produce two journals, *Prime Number* (primary focus) and *Vinculum* (secondary focus). These journals are a tangible benefit to The MAV's members and are produced each term. The standard of the journals continues to climb and it has been pleasing to receive submissions from across the mathematics education sector - including a few international submissions. Editors Roger Walter and Sarah Ferguson have worked with authors to develop and focus their professional contribution to the journals.

The MAV's magazine *Common Denominator* continues to be content rich while maintaining a focus on promoting The MAV's services such as professional development, Maths Active Schools and resources within the MAVshop. The magazine is one of the strongest means of communication to MAV's members and is a showcase for The MAV's positive contribution to the mathematics education community.

The inclusion of advertising also offers The MAV opportunity to raise revenue, whilst allowing us to support key sponsors and other providers to the mathematics education community, especially members.

VCE RESOURCES

KEY ACHIEVEMENTS

- 13 new 2016 – 2017 resources stocked
- 12 new 2016 – 2017 resources published for Mathematics Methods, Further Maths, and Specialist Maths, with an 'All Studies' bundle available for each product at a discounted price.
- Resources include MAV VCAA Exams Solutions, MAV SACs and MAV Trial Exams.

These VCE resources had increased sales compared to the previous year due to the revised VCE Study Design creating opportunity and interest.

Alongside to the Revised VCE, the VCAA released sample exams but no exam solutions, providing The MAV with the opportunity to publish four new resources. The MAV released solutions to VCAA Sample Exams for Mathematics Methods, Further Maths, and Specialist Maths, which can also be purchased as bundle.

MAV SHOP

KEY ACHIEVEMENTS

- Reduction of old stock
- Large bookshop at The MAV's annual conference, with over \$14,000 of stock sold
- 27 new stock items introduced (in addition to the new VCE new resources as listed above)
- Proactive management of online shop to highlight new titles and specials, and more strategic advertising of titles in MAVlist

The screenshot shows the MAVshop website interface. At the top, there's a navigation bar with 'SIGN IN', 'BECOME A MEMBER', and 'FAQS'. Below that is the MAVshop logo and a search bar. The main content area features a large banner for 'Numeracy and literacy' with a 'FIND OUT MORE' button. Below the banner, there are two columns: 'BROWSE BY CURRICULUM' and 'BROWSE BY TYPE'. The 'Featured Items' section displays four books with their titles, authors, and prices. At the bottom, there are four 'VCE SOLUTIONS' buttons for different subjects: '2016 | ALL STUDIES', '2016 | METHODS', '2016 | FURTHER', and '2016 | SPECIALIST'.

In 2016 – 2017, The MAV shop continued to reduce the quantity of older and unpopular titles and resources while introducing contemporary items that align with the requirements of members and the Victorian Curriculum. The MAV staff introduced tighter guidelines for the selection of new stock. There has been an emphasis on promoting stock through the MAV publications including the back cover of *Common Denominator*, through MAVlist including the new *Professional Learning* newsletter which goes out twice a term, and at Professional Learning events.

A review of the stock ordering process, particularly picture story books was undertaken. New procedures have been put in place and as a result nine items are no longer stocked. Pricing of items is also a challenge; with many online stores offering free freight and heavily discounted prices, it is hard to compete with many of the new titles, while maintaining some profit margin. This will be a challenge going forward as we continue to transition to newer titles. We hope that members' willingness to support The MAV will help ensure sales, and we must continue to target unique items that other stores do not have, such as badges, to ensure success.

The presence of The MAV shop at the conference continues to promote The MAV brand, services and resources. It is important that The MAV shop is perceived to be a current, dynamic 'go to' place in mathematics education and a starting point to link out to all The MAV services.

MADE BY MATHS

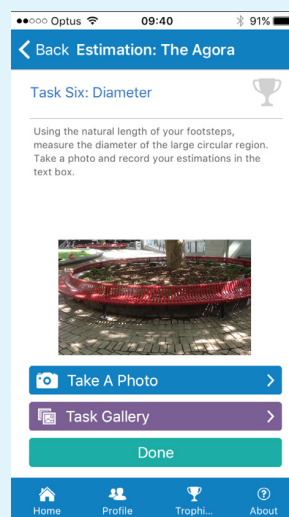
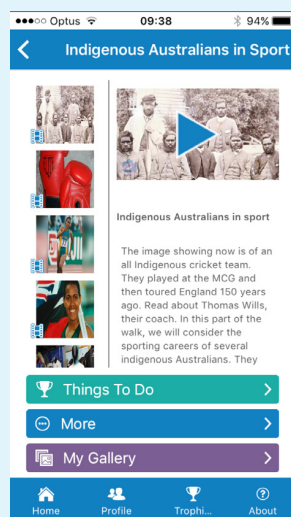
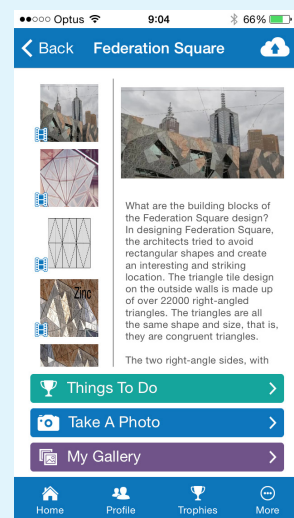
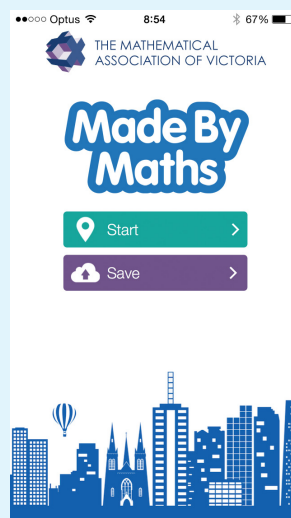
KEY ACHIEVEMENTS

- Upgrade of app to cater for new operating systems for iOS and Android
- Upgrade of app user experience to be more friendly, especially with regards to individuals using the app as opposed to classes
- Launched at the National Sports Museum (NSM) at the 2017 AGM the (NSM) walk
- iOS sales up from \$118 to \$200 – an increase of nearly 70%
- Android sales up from \$15.48 to \$58.05 – an increase of 275%
- 1398 downloads of the app in 2016

In 2016-2017 the Made By Maths app continued to undergo software updates. There were two significant updates. One was due to the major changes both Apple (iOS) and Android made to their operating systems. The changes were necessary to maintain functionality, and also some user experience design work was completed to make the app more intuitive and user friendly. This round of updates has also prepared the system for the generic maths walk, *Explore your World*, which will be released in the 2017.

There are currently four walks on the app at three locations.

- CBD: Swanston Street and Federation Square
- Bundoora: La Trobe University Melbourne Campus
- Melbourne Cricket Ground: National Sports Museum



PROJECTS AND PARTNERSHIPS

STRATEGIC PARTNERSHIPS PROGRAM (SPP)



TEAM:P

KEY ACHIEVEMENTS:

- Annual page views to the TEAM:P website: 226,213
- 713 Primary teachers subscribed to TEAM:P bulletin from 475 schools
- 28.5 hours of professional development delivered through TEAM:P activities

Online membership for TEAM:P increased from 500 to 713 in 2016. Hits on the website increased from nil in 2015 to 226,213 in 2016. This shows further engagement with TEAM:P, although The MAV did not reach all of the original targets set for the project. Activities were a mix of face-to-face and online professional development. This included a variety of webinars for early years and primary teachers including two community day events - *Connect with Maths Day Early Years*; *Spring into TEAM:P Day* and five sessions at The MAV conference. Included on the TEAM:P website was promotion of the Victorian Maths Challenge highlighting schools, families and students who participated in this pilot program from August to November 2016.

Feedback on the professional development delivered indicated a very high level of teacher satisfaction. In completing surveys, teachers cited delivery of presentation, quality of resources and the workshop as meeting their schools needs above expectations. In testimonials teachers felt professional learning impacted on the schools' teaching and learning with increased mathematical content knowledge and improved pedagogical foundations. Many of the professional development sessions run are now available as videos on the TEAM:P website.

The main focus of the TEAM:P project has been professional development, and as such the future of the TEAM:P website is under consideration.

With professional development likely to continue as the focus, maintaining a full website to support this is not cost effective in the long term. The MAV is evaluating the best way to manage this program into the future.



The TEAM:P website.

Maths camp for regional gifted and talented students

KEY ACHIEVEMENTS

- 79 students nominated to attend the maths camp in 2016
- A camp with 40 students was held, as opposed to the target of 20 students in 2016, to make up for the camp not being held in 2015
- Strong relationships were developed between The MAV and industry partners, with the potential to work closely in the future



Year 10 Maths Camp students engaged in an activity at GTAC.

This highly successful maths camp was developed in partnership with seven diverse mathematical industry leaders (IBM, Reserve Bank Australia, DOWNER EDI, Gene Access Technology Centre (GTAC), Ford, ACER, and CSIRO).

The program included presentations from our industry partners demonstrating how they relied on a mathematical base, as well providing an opportunity for students to work on a real-life problem from industry. In teams of five, students worked throughout the week on an open-ended project in their field of choice - either Engineering, ICT, Economics/commerce or Scientific research.

Through both the workshops and providing a mentor to work with the students on the project, our industry partners provided inspiration for students to continue studying mathematics in tertiary years. Mathematicians sourced with the assistance of the Australian Mathematical Sciences Institute also worked with students in an allocated one hour slot each afternoon at RMIT and were available via email to communicate with students throughout the week.

This provided students with contacts who apply mathematics within their industry fields.

An online community for participating students was established in 2016. This was via a closed email group. Through this distribution group we were able to email updates, support and encourage the students after the camp. Likewise, students used this to share ideas and seek advice.

The main evaluation of the camp was via a survey, taken in mid-2016. Results were very positive, with 91% of student respondents replying 'definitely' to the question: 'I would recommend the camp to 2017 Year 10 students' and the remaining 9% replying 'yes'. 76% of student respondents replied 'definitely' to the survey question: 'I felt the camp provided me with information that would assist me in making future career choices' and 19% replied 'yes' to this question. A number of parents have given us feedback since the camp letting us know their child's career decision has changed or been re-focused as a result of their camp experience, and that they are more motivated at school.

Camp organiser, Helen Haralambous, did a fantastic job making the program a reality, and The MAV looks forward to the opportunity of working with our industry partners again in the future to further develop this exciting program.

Meeting diverse student mathematical needs

KEY ACHIEVEMENTS

- Made by Maths app: 1398 students and teachers downloaded the app to use the mathematical walks
- Community mentors assisted regional schools to engage in the MTQ
- Regional maths games days
- Mathematical safety net
- Online support for multiplicative thinking

Meeting diverse student mathematical needs involved five components as targeting regional schools, with below average mathematical results and indigenous students at lower secondary:

1. Development of mathematical walks, the Made by Maths App

This program developed new content for the Made by Maths app, and 1398 students and teachers downloaded the app (See resources section for more information).

2. Engaging community mentors to assist schools to become involved in Maths Talent Quest

The community mentors system was investigated and found not to be the most effective way to increase engagement with MTQ. Instead, The MAV ran several professional learning

sessions in schools to support teachers in incorporating the Maths Talent Quest in their schools. Two of these were held in regional primary schools, one was part of The MAV regional conference in Gippsland, one was held as a webinar, and a further one was held at the annual conference, attracting teachers from metro and regional schools. Due to this effort two new schools, Bayles Regional Primary School and Benalla P-12 College officially entered the MTQ for the first time. Other schools are now considering joining the program for 2017 after attending the professional development workshop.

3. Setting up online games days for regional students

A face-to-face Maths Games Day was run for students in the Gippsland region with great success.

Investigation also took place with the Warrnambool Corangamite Maths network to host an online Maths Games Day for the region using Adobe Connect. The proposal was that three or four schools in that region would be host venues, and schools from up to an hour's drive would travel to that venue with a number of teams. The Games Day Master would be based at The MAV in Brunswick, and MC the activities via Adobe Connect. The planning for the online Maths Games day took place, however the challenge of getting a number of different schools to coordinate the event at the appropriate timing and the IT difficulty did not allow this aspect of the project to get off the ground. In 2017, The MAV will continue to work with that network to undertake an online games day, and will also investigate the expansion of games days in regional area as face-to-face activities.

4. Mathematical safety net

The MAV had a consultant visit eight government secondary schools in low SES parts of the state, and worked with mathematics leaders and faculties to help them move towards catering for differentiation and engaging hands-on activities. These schools have also been given a package of The MAV resources (Teach Maths For Understanding) to assist good teaching. We have found that the schools visited are in need of assistance to implement a change of this type and magnitude. It needs planning and teacher education over time to determine success. The program will continue with these schools and expand to further schools in 2017.

5. Online support for multiplicative thinking

This online support has been developed as part of The MAV website as part of Teach Maths for Understanding. At the secondary level it provides support for teachers to teach the entire Victorian Curriculum from levels 3 to 10A. This range is needed because of the lowest levels of the students in Year 7 and 8 classrooms.

PROJECTS AND PARTNERSHIPS (CONTINUED)



The support provides links to resources (including those on the DET/FUSE website) for whole class activities, and small group activities: targeted teaching, hands-on worksheets and digital tools.

Workshops for teachers have been held at The MAV annual conference, and resources have been incorporated into many other professional learning activities throughout the year. The resource Teach Maths for Understanding is already used by a number of both primary and secondary schools to either enhance or occasionally to replace textbook teaching. Those schools who use it in its fullest form access a wide variety of suitable resources and are able to readily find suitable activities to match the learning needs of the wide range of abilities of their students.

VICTORIAN RESPONSIBLE GAMBLING FOUNDATION

KEY ACHIEVEMENTS

- VCAL resources produced and released in collaboration with the Foundation
- The Foundation sponsored the annual conference including taking a booth to promote the resources

The MAV also worked with the Victorian Responsible Gambling Foundation in 2016 to provide resources for the VCAL curriculum at Year 10. These resources provide a means by which teachers can deliver and develop numeracy, while tackling the social issue of responsible gambling.

The MAV would like to thank the Foundation for its support; the partnership has been a most promising and productive one, with The MAV being recognised on the Foundation website, news and resources as a key partner. In 2017 The MAV have started work on support material for the VCAL resources, again working with the Foundation.

To see the resources available as part of the School Education Program, Love the Game, visit: www.responsiblegambling.vic.gov.au/awareness-and-prevention/young-people-and-gambling/school-education-program.

VICTORIAN MATHS CHALLENGE (VMC)

KEY ACHIEVEMENTS

- Resources successfully developed and published in collaboration with the Victorian Department of Education
- The Victorian Maths Challenge directly engaged 42 Victorian schools
- The MAV staff and consultants attended 10 Victorian Schools, where they facilitated information sessions and 5 family mathematics events.

The MAV was engaged by the Victorian Department of Education throughout 2016 to support the development of The Victorian Maths Challenge (VMC). The Victorian Maths Challenge provides real-world mathematics tasks to engage and inspire students and families, using contexts in the world around them, making connections to STEM, in

their future employment and to make clear understandings about where and why mathematics is needed in our society.

The challenge exposes families to the mathematics intrinsic in daily life; inspires families to work collaboratively using each other's experiences; develops inquiry learning approaches and challenges students to develop strategies to solve real life problems. Foremost the challenge aims to increase engagement in mathematics and create positive perceptions of the importance of mathematics in society, aligning well to The MAV's core statement.

The MAV undertook two main tasks; developing the challenges that are used at events, in schools or at home, and moderating and encouraging the online community to create engagement during the pilot. The pilot was conducted from 6 September to 29 November 2016.

The Victorian Maths Challenge directly engaged 42 Victorian schools that participated by holding events and promoting the VMC in their school newsletter and/or on

their school website. Other associated activities included conducting in-class, cross-class and co-curricular activities with students. The MAV's outreach extended to a further 128 individual schools and school networks, which in turn continued advocacy within their own communities. This being an important value add to the significance of the Challenge to the DET's flagship initiatives of STEMVic future goals for STEM inclusive education. The MAV staff and consultants attended ten Victorian Schools, where they facilitated five Family Maths events.

The MAV would like to thank the staff, consultants and volunteers who have supported this successful initiative. The MAV is engaged again in 2017 with the Victorian DET in further work around the next phases of the Victorian Maths Challenge.

www.education.vic.gov.au/about/events/vmc/Pages/default.aspx

[VICTORIAN] MATHS CHALLENGE!

1. Setting the Scene

As a planet, we have a limited number of resources for the people who live here. We need to make sure that we are using resources in the most efficient way. We call this optimisation.

In this challenge you and your family need to think about how you can best optimise your use of scarce resources when planning to build imaginary plant enclosures. You will use your knowledge of shapes to find the best solutions.



Links to the Curriculum

Measurement and Geometry, Levels 4-10

Maths Words

optimisation - finding the best solution for any given situation.

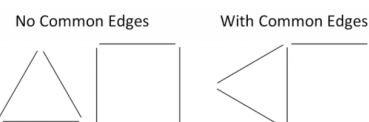
Find more maths words in the [Glossary](#).

2. The Challenge

Using 19 equal lengths, make as many different shapes as possible.

1. Each person should gather 19 items which are straight and have the same length. These could be 19 toothpicks, matchsticks or pens. These 19 straight items will represent pieces of fence to build your plant enclosures. If you don't have 19 for each person, team up.
2. Find a flat surface to try out the different shape combinations.
3. Build the maximum number of different shape enclosures using your 19 'fences'. They may not share any edges. That means there must be a gap between each enclosure. How many different enclosures can you make? Take a photo to share.
4. Try again but this time build your enclosures so that they share common edges. Can you build 4, 5 or maybe even 6 different shaped enclosures?

See the image below for an example of what 'sharing a common edge' means.



Coach Chloe's Advice

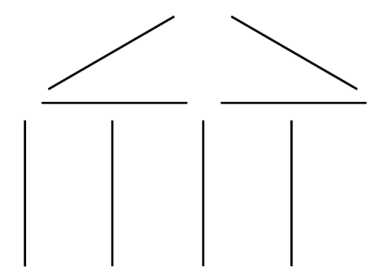
Hi, I'm Coach Chloe. If you are stuck, I have some questions and suggestions that might help.

Make a list of all of the different two dimensional shapes you could use. Remember that there are many quadrilaterals (four sided shapes) you can build. Have a look at [this website](#) to explore quadrilaterals further.

Can you name a shape with more than four sides which would use fewer fence lengths than a rectangle?

3. Keep Going

The shape below represents a farm house. Take 11 of your equal straight lengths and rearrange them into the following shape:



By moving 2 lengths (pens/matchsticks/toothpicks), how many squares can you make? You may lay lengths on top of one another. Can you make 8, 10 or even 11 squares?

By moving 4 lengths (pens/matchsticks/toothpicks), how many squares can you make? You may lay lengths on top of one another. Can you make 8, 10, 11 or even 15 squares?

A sample activity from the Victorian Maths Challenge website.



**THE MATHEMATICAL
ASSOCIATION
OF VICTORIA**

**FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 JANUARY 2017
ACN 004 892 755**

The Mathematical Association of Victoria

ACN 004 892 755

Directors' Report

31 January 2017

The directors present their report on The Mathematical Association of Victoria for the financial year ended 31 January 2017.

1. General information

Information on directors

The names of each person who has been a director during the year and to the date of this report are:

Ms Linda Baron (Resigned 17 May 2016)
Qualifications Teacher

Ms Elizabeth Burns
Qualifications Teacher
Special responsibilities Secretary

Mr Rhys Coulson
Qualifications Teacher

Dr Ann Downton
Qualifications University lecturer

Mr Trevor Faure
Qualifications University lecturer

Dr Marjorie Horne
Qualifications University lecturer
Special responsibilities Immediate Past President

Ms Patricia Jelbart
Qualifications Teacher

Ms Rhiannon Lowrey
Qualifications Teacher
Special responsibilities Vice President

Ms Allason McNamara
Qualifications Teacher
Special responsibilities Past President

Ms June Penney
Qualifications Teacher

Ms Francesca Sidari
Qualifications Teacher
Special responsibilities Vice President

Mr James Spithill
Qualifications Research fellow
Special responsibilities President

The Mathematical Association of Victoria

ACN 004 892 755

Directors' Report

31 January 2017

1. General information (continued)

Information on directors (continued)

Dr Max Stephens

Qualifications University lecturer

Special responsibilities Treasurer

Ms Julie Tillyer

(Resigned 17 May 2016)

Qualifications Teacher

Ms Jacyntha Krakouer

(Appointed 17 May 2016; Resigned 07 September 2016)

Qualifications Graduate Research Fellow

Mr James Gray

(Appointed 09 June 2016)

Qualifications Teacher

Mr Oliver Lovell

(Appointed 17 May 2016)

Qualifications Teacher, Consultant

Ms Michaela Epstein

(Appointed 17 May 2016)

Qualifications Head of Learning

Directors have been in office since the start of the financial year to the date of this report unless otherwise stated.

Company secretary

The following person held the position of Company secretary at the end of the financial year:

Mr Peter Saffin (Chief Executive Officer)

Principal activities

The principal activity of The Mathematical Association of Victoria during the financial year was the provision of services aimed at promoting mathematics within the community.

No significant changes in the nature of the Company's activity occurred during the financial year.

Members guarantee

The Mathematical Association of Victoria is a company limited by guarantee. In the event of, and for the purpose of winding up of the company, the amount capable of being called up from each members and any person or association who ceased to be a member in the year prior to the winding up, is limited to \$ 20 for each member, subject to the provisions of the company's constitution.

At 31 January 2017 the collective liability of members was \$ 28,020 (2016: Loss \$ 28,020).

The Mathematical Association of Victoria

ACN 004 892 755

Directors' Report

31 January 2017

2. Operating results and review of operations for the year

Operating results

The profit of the Company amounted to \$ 32,902 (2016: Loss \$ (86,737)).

Review of operations

The results of the operations of the entity during the financial year reflect decisions taken by directors to further refine the mix of the entity's services within the ongoing framework of strategic planning and priority setting.

3. Other items

Significant changes in state of affairs

There have been no significant changes in the state of affairs of the Company during the year.

Events after the reporting date

No matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Company, the results of those operations or the state of affairs of the Company in future financial years.

Future developments and results

The entity expects to maintain the present status and level of operations and hence there are no likely developments in the entity's operations.

Environmental issues

The Company's operations are not regulated by any significant environmental regulations under a law of the Commonwealth or of a state or territory of Australia.

4. Options

No options over issued shares or interests in the Company were granted during or since the end of the financial year and there were no options outstanding at the date of this report.

5. Indemnification and insurance of officers and auditors

The company has paid an insurance premium to indemnify the officers acting in their capacity as officers of the company. During or since the end of the financial year, no other indemnities have been given in relation to the officers of the company.

No indemnities have been given or insurance premiums paid, during or since the end of the financial year, on behalf of the auditor of the company.

The Mathematical Association of Victoria

ACN 004 892 755

Directors' Report

31 January 2017

6. Meetings of directors

During the financial year, 7 meetings of directors were held. Attendances by each director during the year were as follows:

	Directors' Meetings	
	Number eligible to attend	Number attended
Ms Linda Baron	2	1
Ms Elizabeth Burns	7	6
Mr Rhys Coulson	7	4
Dr Ann Downton	7	5
Mr Trevor Faure	6	2
Dr Marjorie Horne	7	4
Ms Patricia Jelbart	7	5
Ms Rhiannon Lowrey	7	6
Ms Allason McNamara	7	6
Ms June Penney	7	7
Ms Francesca Sidari	7	7
Mr James Spithill	7	6
Dr Max Stephens	7	6
Ms Julie Tillyer	1	-
Ms Jacyнта Krakouer	2	1
Mr James Gray	5	4
Mr Oliver Lovell	5	4
Ms Michaela Epstein	5	4

7. Proceedings on behalf of company

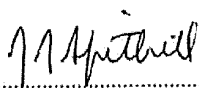
No person has applied for leave of Court to bring proceedings on behalf of the entity or intervene in any proceedings to which the entity is a party for the purpose of taking responsibility on behalf of the entity for all or any part of those proceedings.

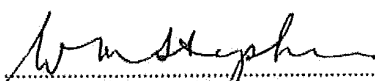
The entity was not a party to any such proceedings during the year.

8. Auditor's independence declaration

The lead auditor's independence declaration in accordance with section 307C of the *Corporations Act 2001*, for the year ended 31 January 2017 has been received and can be found on page 5 of the financial report.

Signed in accordance with a resolution of the Board of Directors:

Director: 
Mr James Spithill

Director: 
Dr Max Stephens

Dated this 18th day of April 2017

The Mathematical Association of Victoria

ABN 004 892 755

**Auditor's Independence Declaration under Section 307C of the
Corporations Act 2001 to the Directors of The Mathematical Association of
Victoria**

As lead audit partner for the audit of the financial statements of The Mathematical Association of Victoria for the financial year ended 31 January 2017, I declare that to the best of my knowledge and belief, there have been no contraventions of:

- (a) the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- (b) any applicable code of professional conduct in relation to the audit.

**Nexia Melbourne Audit Pty Ltd****Melbourne
Dated: this 2nd day of March 2017****Andrew S. Wehrens
Director**

The Mathematical Association of Victoria

ACN 004 892 755

Statement of Profit or Loss and Other Comprehensive Income For the Year Ended 31 January 2017

		2017	2016
	Note	\$	\$
Revenue	4	1,673,392	1,521,999
Other income	4	22,610	14,792
Employee benefits expense		(570,308)	(520,090)
Depreciation and amortisation expense		(99,007)	(104,831)
Membership expenses		(82,249)	(66,916)
Publications and journals		(214,975)	(221,846)
Annual conference		(260,887)	(315,021)
Student activities		(94,710)	(58,213)
Professional development		(105,740)	(167,589)
Other expenses		(235,224)	(169,014)
Finance costs		-	(8)
Profit/(loss) for the year		32,902	(86,737)
Other comprehensive income			
Items that will not be reclassified subsequently to profit or loss			
Net gain on revaluation of non-current asset		25,295	135,133
Other comprehensive income for the year		25,295	135,133
Total comprehensive income for the year		58,197	48,396

The Mathematical Association of Victoria

ACN 004 892 755

Statement of Financial Position

31 January 2017

	Note	2017 \$	2016 \$
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	6	386,707	323,393
Trade and other receivables	7	126,854	133,225
Inventories	8	42,298	53,309
Other assets	11	47,370	19,207
TOTAL CURRENT ASSETS		603,229	529,134
NON-CURRENT ASSETS			
Property, plant and equipment	9	1,653,571	1,635,226
Intangible assets	10	113,878	200,700
TOTAL NON-CURRENT ASSETS		1,767,449	1,835,926
TOTAL ASSETS		2,370,678	2,365,060
LIABILITIES			
CURRENT LIABILITIES			
Trade and other payables	12	318,996	334,409
Employee benefits	14	132,950	169,023
Other liabilities	13	187,017	188,110
TOTAL CURRENT LIABILITIES		638,963	691,542
TOTAL LIABILITIES		638,963	691,542
NET ASSETS		1,731,715	1,673,518
EQUITY			
Reserves	15	1,346,531	1,321,236
Retained earnings		385,184	352,282
TOTAL EQUITY		1,731,715	1,673,518

The Mathematical Association of Victoria

ACN 004 892 755

Statement of Changes in Equity For the Year Ended 31 January 2017

2017

	Retained Earnings	Revaluation Reserve	Total
	\$	\$	\$
Balance at 1 February 2016	352,282	1,321,236	1,673,518
Profit attributable to members of the parent entity	32,902	-	32,902
Total other comprehensive income for the period	-	25,295	25,295
Balance at 31 January 2017	385,184	1,346,531	1,731,715

2016

Balance at 1 February 2015	439,019	1,186,103	1,625,122
Loss attributable to members of the parent entity	(86,737)	-	(86,737)
Total other comprehensive income for the period	-	135,133	135,133
Balance at 31 January 2016	352,282	1,321,236	1,673,518

The Mathematical Association of Victoria

ACN 004 892 755

Statement of Cash Flows

For the Year Ended 31 January 2017

	2017	2016
Note	\$	\$
CASH FLOWS FROM OPERATING ACTIVITIES:		
Receipts from customers, members and grants	1,699,107	1,547,645
Payments to suppliers and employees	(1,632,731)	(1,507,109)
Interest received	2,173	2,581
Net cash provided by operating activities	17 <u>68,549</u>	<u>43,117</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payment for intangible asset	-	(87,581)
Purchase of property, plant and equipment	(5,235)	(3,676)
Net cash used in investing activities	<u>(5,235)</u>	<u>(91,257)</u>
Net increase/(decrease) in cash and cash equivalents held	63,314	(48,140)
Cash and cash equivalents at beginning of year	<u>323,393</u>	<u>371,533</u>
Cash and cash equivalents at end of financial year	6 <u><u>386,707</u></u>	<u><u>323,393</u></u>

The Mathematical Association of Victoria

ACN 004 892 755

Notes to the Financial Statements For the Year Ended 31 January 2017

The financial report covers The Mathematical Association of Victoria as an individual entity. The Mathematical Association of Victoria is a not-for-profit Company limited by guarantee, incorporated and domiciled in Australia.

The functional and presentation currency of The Mathematical Association of Victoria is Australian dollars.

Comparatives are consistent with prior years, unless otherwise stated.

The Company is an entity to which ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 applies and, accordingly amounts in the financial statements and Directors' Report have been rounded to the nearest dollar.

1 Basis of Preparation

In the Directors opinion, the Company is not a reporting entity since there are unlikely to exist users of the financial report who are not able to command the preparation of reports tailored so as to satisfy specifically all of their information needs. This special purpose financial report has been prepared to meet the reporting requirements of the *Corporations Act 2001*.

The financial statements have been prepared in accordance with the recognition and measurement requirements of the Australian Accounting Standards and Accounting Interpretations, and the disclosure requirements of AASB 101 *Presentation of Financial Statements*, AASB 107 *Statement of Cash Flows*, AASB 108 *Accounting Policies, Changes in Accounting Estimates and Errors* and AASB 1054 *Australian Additional Disclosures*.

The financial statements have been prepared on an accruals basis and are based on historical costs modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and financial liabilities.

Significant accounting policies adopted in the preparation of these financial statements are presented below and are consistent with prior reporting periods unless otherwise stated.

2 Summary of Significant Accounting Policies

(a) Income Tax

The Company is exempt from income tax under Division 50 of the *Income Tax Assessment Act 1997*.

(b) Revenue and other income

Revenue from the sale of goods is recognised upon the delivery of goods to customers.

Grant and sponsorship revenue is recognised in the statement of profit or loss and other comprehensive income when it is controlled. When there are conditions attached to grant revenue relating to the use of those grants for specific purposes it is recognised in the statement of financial position as a liability until such conditions are met or services provided.

Interest is recognised using the effective interest method.

Revenue from the rendering of a service is recognised upon the delivery of the service to the customers.

Membership fees are recognised when invoiced.

All revenue is stated net of the amount of goods and services tax (GST).

The Mathematical Association of Victoria

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Notes to the Financial Statements

For the Year Ended 31 January 2017

2 Summary of Significant Accounting Policies (continued)

(c) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

(d) Inventories

Inventories are measured at the lower of cost and net realisable value.

(e) Property, plant and equipment

Each class of property, plant and equipment is carried at cost or fair value less, where applicable, any accumulated depreciation and impairment.

Property

Freehold land and buildings are shown at their fair value determined by the directors from advice and information obtained in relation to local property prices.

Increases in the carrying amount arising on revaluation of land and buildings are recognised in comprehensive income and accumulated in the revaluation reserve in equity. Decreases that offset previous increases of the same class shall be recognised in comprehensive income under the heading of revaluation surplus. All other decreases are charged to the statement of profit or loss and other comprehensive income.

Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset.

Plant and equipment

Plant and equipment are measured on the cost basis less depreciation and impairment losses. The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the assets employment and subsequent disposal. The expected net cash flows have been discounted to their present values in determining recoverable amounts.

Depreciation

Property, plant and equipment, excluding freehold land, is depreciated on a straight-line basis over the assets useful life to the Company, commencing when the asset is ready for use.

The depreciation rates used for each class of depreciable asset are shown below:

Fixed asset class	Depreciation rate
Buildings	2-12%
Plant and Equipment	12-25%
Furniture, Fixtures and Fittings	9%

At the end of each annual reporting period, the depreciation method, useful life and residual value of each asset is reviewed. Any revisions are accounted for prospectively as a change in estimate.

The Mathematical Association of Victoria

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Notes to the Financial Statements

For the Year Ended 31 January 2017

2 Summary of Significant Accounting Policies (continued)

(e) Property, plant and equipment (continued)

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains or losses are included in the statement of profit or loss and other comprehensive income. When revalued assets are sold, amounts included in the revaluation reserve relating to that asset are transferred to retained earnings.

(f) Impairment of non-financial assets

At each reporting date, all assets except for, inventories, assets arising from employee benefits, investment property and financial instrument assets are assessed to determine whether there is an indication of impairment. If there is an indication of impairment, the assets concerned are tested as to whether their carrying amount exceeds the recoverable amount, the difference is written-off by a charge to the statement of profit or loss and other comprehensive income except to the extent that the write-down can be debited to an asset revaluation reserve amount applicable to that class of asset.

At each reporting date, assets previously determined to be impaired are assessed for circumstances indicating that an impairment loss recognised in prior periods no longer exists or may have decreased. If there is an indication that the impairment loss has been reversed, the assets concerned are tested as to whether the recoverable amount exceeds the carrying amount, the difference not exceeding the original impairment is credited to the statement of profit or loss and other comprehensive income except for revalued assets which are credited to an asset revaluation reserve.

(g) Intangibles

Software

Software has a finite life and is carried at cost less any accumulated amortisation and impairment losses. It has an estimated useful life of between one and four years.

(h) Cash and cash equivalents

Cash and cash equivalents comprises cash on hand, demand deposits and short-term investments which are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

Bank overdrafts also form part of cash equivalents for the purpose of the statement of cash flows and are presented within current liabilities on the statement of financial position.

(i) Employee benefits

Provision is made for the Company's liability for employee benefits arising from services rendered by employees to the end of the reporting period. Employee benefits that are expected to be wholly settled within one year have been measured at the amounts expected to be paid when the liability is settled.

Employee benefits expected to be settled more than one year after the end of the reporting period have been measured at the present value of the estimated future cash outflows to be made for those benefits.

Contributions are made by the entity to an employee superannuation fund and are charged as expenses when incurred.

The Mathematical Association of Victoria

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Notes to the Financial Statements

For the Year Ended 31 January 2017

2 Summary of Significant Accounting Policies (continued)

(j) Provisions

Provisions are recognised when the Company has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured.

(k) Receivables

Receivables are initially measured at fair value and subsequently measured at amortised cost using the effective interest rate method less any allowance for impairment. Any allowance for impairment is expensed through the statement of profit or loss and other comprehensive income. Trade receivable credit terms are 30 days.

(l) Trade payables

Liabilities are recognised for amounts to be paid in the future for goods and services received, whether or not invoiced to the company. Creditors are normally settled on 30 days terms.

3 Critical Accounting Estimates and Judgments

The directors make estimates and judgements during the preparation of these financial statements regarding assumptions about current and future events affecting transactions and balances.

These estimates and judgements are based on the best information available at the time of preparing the financial statements, however as additional information is known then the actual results may differ from the estimates.

The Mathematical Association of Victoria

ACN 004 892 755

Notes to the Financial Statements For the Year Ended 31 January 2017

4 Revenue and Other Income

	2017	2016
	\$	\$
Revenue		
- membership fees	330,168	319,002
- seminars and conferences	477,490	471,429
- talent and student activities	147,806	150,705
- publications and solutions	278,517	231,726
- professional development	332,112	298,152
- grants and sponsorships	107,299	50,985
	<u>1,673,392</u>	<u>1,521,999</u>
Other Income		
- interest	2,173	2,581
- miscellaneous	20,437	12,211
	<u>22,610</u>	<u>14,792</u>
Total Revenue and Other Income	<u>1,696,002</u>	<u>1,536,791</u>

5 Result for the Year

The result for the year was derived after charging / (crediting) the following items:

Other expenses:

Provision for long service leave	(36,243)	9,420
Depreciation and amortisation expense		
- buildings	5,862	5,862
- plant and equipment, furniture and fittings	6,323	4,462
- software	86,822	94,507
Auditors remuneration		
- auditing the accounts	9,420	8,520
- prior year under provision	-	887

6 Cash and Cash Equivalents

Cash on hand	800	800
Bank balances	385,907	322,593
	<u>386,707</u>	<u>323,393</u>

Reconciliation of cash

Cash and Cash equivalents reported in the statement of cash flows are reconciled to the equivalent items in the statement of financial position as follows:

Cash and cash equivalents	<u>386,707</u>	<u>323,393</u>
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The Mathematical Association of Victoria

ACN 004 892 755

Notes to the Financial Statements For the Year Ended 31 January 2017

7 Trade and Other Receivables

	2017	2016
	\$	\$
CURRENT		
Trade receivables	126,854	117,736
Other receivables	-	15,489
	<u>126,854</u>	<u>133,225</u>

8 Inventories

CURRENT		
At cost:		
Publications	<u>42,298</u>	<u>53,309</u>

9 Property, plant and equipment

LAND AND BUILDINGS		
Freehold land		
At directors' valuation	<u>1,346,531</u>	1,321,236
Buildings		
At cost	479,270	479,270
Accumulated depreciation	<u>(187,097)</u>	(181,235)
Total buildings	<u>292,173</u>	298,035
Total land and buildings	<u>1,638,704</u>	1,619,271
PLANT AND EQUIPMENT		
Plant and equipment, furniture and fittings		
At cost	298,582	293,348
Accumulated depreciation	<u>(283,715)</u>	(277,393)
Total plant and equipment, furniture and fittings	<u>14,867</u>	15,955
Total property, plant and equipment	<u>1,653,571</u>	<u>1,635,226</u>

The Company's land and buildings at 61 Blyth Street, Brunswick were valued at 29 August 2016 by the directors. Valuations were made using the price that would be received to sell the asset in an orderly transaction between market participants at the the measurement date. The revaluation surplus was credited to an asset revaluation reserve in shareholders' equity.

10 Intangible Assets

Software		
Cost	590,866	590,866
Accumulated amortisation	<u>(476,988)</u>	(390,166)
Net carrying value	<u>113,878</u>	<u>200,700</u>

The Mathematical Association of Victoria

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Notes to the Financial Statements For the Year Ended 31 January 2017

11 Other Assets

	2017	2016
	\$	\$
CURRENT		
Prepayments	47,370	19,207

12 Trade and Other Payables

CURRENT		
Unsecured liabilities		
Trade payables	230,211	95,453
GST payable	32,134	31,137
Accrued expenses	13,184	185,174
Other liabilities	43,467	22,645
	<u>318,996</u>	<u>334,409</u>

13 Other Liabilities

CURRENT		
Memberships received in advance (net of subscriptions)	187,017	188,110

14 Employee Benefits

Current liabilities		
Annual leave	55,588	55,418
Long service leave	77,362	113,605
	<u>132,950</u>	<u>169,023</u>

15 Reserves

Asset revaluation reserve		
Opening balance	1,321,236	1,186,103
Revaluation increment	25,295	135,133
	<u>1,346,531</u>	<u>1,321,236</u>

The asset revaluation reserve records fair value movements on freehold land and building located in 61 Blyth Street, Brunswick held under the revaluation model.

16 Members' Guarantee

The Company is incorporated under the *Corporations Act 2001* and is a Company limited by guarantee. If the Company is wound up, the constitution states that each member is required to contribute a maximum of \$ 20 each towards meeting any outstandings and obligations of the Company. At 31 January 2017 the number of members was 1,401 (2016: 1,401).

The Mathematical Association of Victoria

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Notes to the Financial Statements For the Year Ended 31 January 2017

17 Cash Flow Information

Reconciliation of net income to net cash provided by operating activities:

	2017	2016
	\$	\$
Profit/(loss) for the year	32,902	(86,737)
Non-cash flows in profit/(loss):		
- depreciation and amortisation	99,007	104,831
Changes in assets and liabilities:		
- (increase)/decrease in trade and other receivables	6,371	(65,918)
- (increase)/decrease in prepayments	(28,163)	1,266
- (increase)/decrease in inventories	11,011	(12,517)
- increase/(decrease) in income in advance	(1,093)	79,353
- increase/(decrease) in trade and other payables	(15,413)	13,419
- increase/(decrease) in employee benefits	(36,073)	9,420
Cashflow from operating activities	<u>68,549</u>	<u>43,117</u>

18 Company Details

The registered office of and principal place of business of the company is:

The Mathematical Association of Victoria
61 Blyth Street
Brunswick VIC 3056

The Mathematical Association of Victoria

ACN 004 892 755

Directors' Declaration

In the directors' opinion:

1. The Company is a not reporting entity because there are no users dependent upon general purpose financial statements. Accordingly, the attached special purpose financial report has been prepared in accordance with the accounting policies as described in Note 2 to the financial statements.
2. The financial statements and accompanying notes, as set out on pages 6 to 17, are in accordance with the *Corporations Act 2001* and:
 - (a) comply with Australian Accounting Standards as stated in Note 1 and the *Corporations Regulations 2001*; and
 - (b) give a true and fair view of the financial position as at 31 January 2017 and of the performance for the year ended on that date.
3. There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the Directors.

Director
Mr James Spithill

Director
Dr Max Stephens

Dated this 18th day of April 2017

Independent Auditor's Report To the Members of The Mathematical Association of Victoria

Report on the Audit of the Financial Report

Opinion

We have audited the financial report, being a special purpose financial report, of The Mathematical Association of Victoria (the Company), which comprises the statement of financial position as at 31 January 2017, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of The Mathematical Association of Victoria is in accordance with the *Corporations Act 2001*, including:

- (i) giving a true and fair view of the Company's financial position as at 31 January 2017 and of its financial performance for the year then ended; and
- (ii) complying with Australian Accounting Standards to the extent described in Note 1, and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the Company in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter regarding basis of accounting

Without modifying our opinion, we draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared for the purpose of fulfilling the directors' financial reporting responsibilities under the *Corporations Act 2001*. As a result, the financial report may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Directors' responsibility for the financial report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view and have determined that the basis of preparation described in Note 1 to the financial statements is appropriate to meet the requirements of the *Corporations Act 2001* and is appropriate to meet the needs of the members. The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

Independent Auditor's Report To the Members of The Mathematical Association of Victoria

Report on the Audit of the Financial Report

Directors' responsibility for the financial report continued...

In preparing the financial report, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibility for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by those charged with governance.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



**Independent Auditor's Report
To the Members of The Mathematical Association of Victoria**

Report on the Audit of the Financial Report

Auditor's responsibility for the audit of the financial report continued...

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



Nexia Melbourne Audit Pty Ltd



Andrew S. Wehrens
Director

Melbourne

Dated this 24th day of April 2017



Disclaimer of Opinion on Detailed income and expenditure statement for the year ended 31 January 2017

The additional financial data presented on page 23 is in accordance with the books and records of the Company which have been subjected to the auditing procedures applied in our statutory audit of the Company for the year ended 31 January 2017.

It will be appreciated that our statutory audit did not cover all details of the additional financial data. Accordingly, we do not express an opinion on such financial data and we give no warranty of accuracy or reliability in respect of the data provided.

Neither the firm nor any member or employee of the firm undertakes responsibility in any way whatsoever to any person (other than The Mathematical Association of Victoria) in respect of such data, including any errors or omissions therein however caused.



Nexia Melbourne Audit Pty Ltd



Andrew S. Wehrens
Director

Melbourne

Dated this *24th* day of *April* 2017

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The Mathematical Association of Victoria

ACN 004 892 755

For the Year Ended 31 January 2017

Detailed Income Statement

	2017	2016
	\$	\$
Income		
Membership fees	330,168	319,002
Conference - December	477,490	471,429
Talent quest and student activities	147,806	150,705
Publications and solutions	278,517	231,726
Services revenue UD1_5	332,112	298,152
Grants and sponsorships	107,299	50,985
Interest received	2,173	2,581
Miscellaneous income	20,437	12,211
Total income	1,696,002	1,536,791
Less: Expenses		
Advertising and promotion	62,730	60,968
Affiliation fees	50,858	41,845
Auditors remuneration	9,420	9,407
Bank charges	4,645	4,359
Catering expenses	87,059	116,000
Cleaning	8,240	10,351
Consultants and presenters	273,732	270,389
Depreciation and amortisation	99,007	104,831
Equipment rental	43,069	58,610
Facilities - external	47,451	47,705
Heat, light and power	4,183	5,427
Interest expense	-	8
Courier service	518	1,114
Insurance	13,417	13,466
Legal fees	8,999	4,996
Long service leave	(36,243)	9,420
Office expenses	33,310	725
Postage and freight	21,752	19,710
Publications, printing and stationery	121,752	151,417
Rates and taxes	5,043	4,603
Repairs and maintenance	3,148	5,060
Royalties and authors fees	87,939	83,169
Wages	550,046	465,444
Staff training	-	1,839
Staff and members amenities	8,037	6,500
Subscriptions	2,197	1,904
Superannuation contributions	56,639	44,879
Telephone and fax	24,833	28,138
Travelling and accommodation	67,885	48,264
Workcover	3,434	2,980
Total Expenses	1,663,100	1,623,528
Profit/(loss) from ordinary activities	32,902	(86,737)



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