

THE MATHEMATICAL ASSOCIATION OF VICTORIA



THE MATHEMATICAL ASSOCIATION OF VICTORIA ANNUAL REPORT 2019-2020

www.mav.vic.edu.au

VALUING MATHEMATICS IN SOCIETY

MAV PROVIDES A VOICE, LEADERSHIP AND PROFESSIONAL SUPPORT FOR MATHEMATICS EDUCATION.

PRESIDENT'S REPORT - MICHAEL O'CONNOR



Over the 2019 to 2020 (February 2019 to end of January 2020) reporting period The Mathematical Association of Victoria (MAV) had another successful year.

It was positive to see a very strong financial result, adding to

MAV's reserves and ensuring that we are becoming a more sustainable organisation for the future.

Beyond this financial success, which is important, I would also like to reflect upon the various other areas of success for MAV during the previous year. It has been my first year as President, and it has been a pleasure working with the Board and CEO, staff and volunteers to ensure smooth operations at all levels. I have been impressed by the dedication of all of those who support MAV; it is our community that makes us strong. There is no shortage of ongoing support and love for our great Association.

During the past year, we again saw new offerings and the strengthening of existing offerings within MAV's products and services. Some notable examples include, our third primary conference with substantial growth in attendance, exceptional growth in student attendance at our VCE revision lectures including new venues running events, and another highly successful annual conference.

Games days, Maths Talent Quest (MTQ) and Girls in STEM events as well as the maths camp for regional year 10 students all ensured that MAV also provided quality opportunities for students.

Our professional learning program was strong, and not just face-to-face, but with the expansion of virtual learning sessions. Staff are developing further expertise in online delivery, which will help ensure that MAV is at the forefront of professional learning in the future. For the coming 2020 year, and the current COVID-19 situation, this experience will ensure MAV is held in high regard as we continue to expand further into digital offerings. MAV also saw growth in membership. This was particularly relevant in the area of free student-teacher/pre-service teacher members. MAV had agreed to strategically focus on building this membership group as the future of our Association depends upon them. MAV ran its first networking event for this target audience with great success, and further work will continue in 2020.

MAV also continued to improve its operations. A new constitution was approved in May 2019 ensuring that the Association is prepared for coming years. In July 2019 a new association software management system was launched, including a new database, website, events booking, MAV Shop and other functionality to support members and mathematics educators. This platform provides greater security for all our data and those accessing MAV services. It also ensures that we can communicate and engage better with our community. This was a significant project but a large step forward towards ensuring MAV continues to be efficient and focussed on what is important to members.

At the end of 2020 the current strategic plan comes to an end. Much progress has been made across the four goals of membership, partnerships, advocacy and operations. During 2019 the MAV Board began work on the next strategic plan for 2021 to 2023. Membership will again be a strong focus in future strategy, as we work to create new membership models and community building opportunities for the future. While much of the new plan will follow on from progress to date, current events will also undoubtedly play a significant role as well. We look forward to sharing our work and receiving your feedback on the strategic plan as work evolves.

As I write this report the effects of COVID-19 are being felt around the world and there is uncertainty on all fronts. I want to take this opportunity to thank everyone involved in supporting and growing the MAV; the Board, staff, volunteers, members, consultants and all others who support MAV's work for the dedication you have shown throughout the year and especially in recent weeks. We look forward to supporting you through this challenging time, and into the future.

CEO'S REPORT - PETER SAFFIN



During 2019 it was very pleasing to see a growth in MAV's services, leading to an increased impact with MAV members and mathematics educators. This was achieved directly through MAV's products and services, and also through collaboration with many partners. MAV is a very

open organisation, that sees itself as part of the mathematics education ecosystem. This open culture means we are continually looking for opportunities to work with others, to increase support and engagement with mathematics educators across the state and beyond. It also means we are extremely busy as opportunities abound! I would like to thank the staff for their work over the past year in delivering programs and services on behalf of MAV. Without their dedication we would not continue to expand our impact.

During 2019 MAV demonstrated growth in a number of key areas:

- Existing services and areas of operations all grew in both revenue, attendance and participation. This includes for example growth in VCE revision lecture attendance, and professional learning, with direct consulting in primary schools being a highlight.
- Again, MAV worked with partners to develop new programs and opportunities. Increasing partnerships has been a key strategic plan goal for the past three years, and with much hard work by MAV staff our partnerships allow us to reach beyond what we would otherwise be capable of. Notable examples in 2019 include a very successful new conference for F to 10 teachers in collaboration with Independent Schools Victoria (ISV). A further new initiative supported by both Texas Instruments and the Australian Mathematics Trust was the sponsorship of regional delegates to attend the annual conference. This program saw 10 additional teachers attend that would otherwise not have had the chance to undertake this fantastic professional development opportunity.
- Partnerships with existing collaborators were also strengthened, including MAV deepening its relationship with Melbourne Graduate School of Education, delivering the new Maths Collaborative whole school development program to 39 primary school leadership teams from across the state. This work continues in 2020. ANZUK also came on as an annual partner for the first time.
- MAV also continued to support the Victorian Department of Education and Training (DET) through the delivery of the strategic partnerships program

delivering the maths camp and online professional learning program. Notably MAV undertook delivery of professional learning aligned to the Middle Years Literacy and Numeracy Strategy (MYLNS) in term four. After a successful tender at the end of 2019 MAV is also continuing this work in 2020 in collaboration with a new partner, Valad Solutions.

There are many other examples of partnerships including with government authorities where MAV is working on behalf of members and adding value. Many partners are mentioned throughout this report under the various programs to which they contributed. There are far too many to mention here but I would like to thank all of them for their continued and ongoing support for MAV's success.

Financially 2019 saw MAV have a great year, with a significant 16% growth in revenue, backed up by a larger than anticipated surplus of just over \$150,000. Growth across all products and service lines contributed to this success, alongside the addition of new programs.

Operationally, MAV launched a new member database, website and associated functionality. This was a large investment by the MAV to ensure that in future communications, event bookings and other touch points with MAV are of high quality. Work is ongoing in this area to continue to improve, and we have an integrated system that will provide many benefits in future including efficiencies within our team and workflows. This was a major milestone and enabler for the organisation's future.

From a governance viewpoint, MAV worked through most of 2019 under a new constitution, refining Board processes to ensure that MAV is well-prepared for the future. A lot of Board time in the early part of the year was spent on governance related matters, whereas by the end of the year the Board moved to more strategic matters, including work on the next strategic plan to be launched in 2020. It has again been a positive experience working with the Board and I would like to thank them for their ongoing support.

As I write this report we are now in a different scenario, with COVID-19 affecting the organisation significantly. This will create a number of challenges that we will work through in 2020 and beyond. The good news is that there are many ways that MAV can continue to support mathematics educators both directly and with partner support. Ideas of members are welcome, and I look forward to hearing how mathematics educators make the most of the situation to support students across the state. I know that our staff are well-prepared to provide creative solutions and support schools in this new and emerging environment. I'm sure there will be many positive stories that I will be able to share in the next annual report. In the meantime, take care and best of luck with the year to come.

MAV PERSONNEL

Chief Executive Officer	Peter Saffin
Mathematics Education Consultants	Jennifer Bowden (Primary)
	Ellen Corovic (Primary)
	Helen Haralambous (Secondary)
	Danijela Draskovic (Secondary)
Membership Officer	Michael Green
Administration Assistant	Darinka Rob
Events Manager	Jacqui Diamond
Marketing	Louise Gray, Stitch Marketing

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

FINANCE

COMMITTEE MEMBERS

Juan David Ospina León (Chair of Finance Committee), Daniel Craine (independent finance expert), Dan Cloney, Peter Saffin (Executive Officer)

KEY ACHIEVEMENTS

- Reserves increasing over time
- Improved tracking of financial data

This committee continued to work in support of MAV and the Board, monitoring and investigating the Association's financial activities. The committee's work plan involves a number of tasks each year to ensure a focus on MAV's performance, and compliance in regard to financial matters.

Work during the year focused on continuing to build data around the performance of the Association, particularly balance-sheet items. The committee reviews key performance indicators regularly to ensure the Association is tracking according to budget and previous patterns, and has the cash flow to continue to deliver its programs and services effectively. After another successful year the Association's reserves have increased and as of the end of January 2020 were at \$360,000, against a target of \$600,000. This is an increase in reserves of around \$125,000 since the same time last year and demonstrates that MAV is moving in the right direction towards being a more sustainable organisation. Reserves are invested and held in liquid assets in case of a change of circumstances such as an anticipated loss of funding, one-time unbudgeted expense, sudden increase in expenses, or decrease in revenue due to an unforeseen event. At this stage with COVID-19 being an issue for the Association, it is pleasing to have some reserves aside in case they are needed.

Further work is now being done on an investment policy, to ensure that once the reserves target is met any further surplus is used appropriately in the interests of MAV members, and mathematics education, and according to the Objects in the Constitution. This policy will provide a guide for good decision-making and ensure the assets of the organisation are protected in future.

MEMBERSHIP, MARKETING AND COMMUNICATIONS

COMMITTEE MEMBERS

Kylie Slaney (Convenor), Kate Copping, Christiana David, Michaela Epstein, Peter Karakoussis, Michael O'Connor, Jim Spithill, Peter Saffin (Executive Officer)

MEMBERSHIP

KEY ACHIEVEMENTS

- large increase in individual membership, due to growth in free pre-service teacher member category
- primary school membership increased significantly
- development of new membership strategy underway

In the second year after introducing free pre-service teacher (University student) membership, MAV saw a large increase in this cohort of members. This was very pleasing as universities began to engage with MAV and ensure that their students were enrolled. This is a highly important strategy, to ensure that MAV is engaging with its future members. MAV also held its first networking and professional learning event for this target audience (see box below).

There was also growth in primary school members. This was the result of programs in the primary area expanding over prior years, and with more schools undertaking programs led by MAV, membership continues to increase. This is a very pleasing result after a number of years of slow growth, with primary membership now heading back towards levels not seen since 2014.

MAV continues to look for ways to service all of our members regardless of location. After two years of running online virtual learning sessions and recording of keynotes at conferences, feedback is positive that this is supporting our regional educators. Further, MAV introduced the sponsorship of regional delegates to attend the annual conference, further engaging with regional educators in a new way. Events were again held across the state for teachers and students, such as regional network days to ensure that MAV is working in the regions as well as metropolitan areas.

	2014	2015	2016	2017	2018	2019
INDIVIDUAL MEMBERS	454	523	514	461	583	738
Associate members	33	27	29	27	28	33
Early childhood centres	0	9	9	0	0	1
P-12 schools	145	137	135	133	137	141
Secondary schools	319	310	315	322	322	321
Primary schools	458	376	382	403	395	437
INSTITUTIONAL MEMBERS	955	859	870	885	871	933
TOTAL	14 <mark>09</mark>	13 <mark>82</mark>	13 <mark>84</mark>	1346	1454	2045

On Monday the 26th of July, a group of pre-service primary and secondary Mathematics teachers gathered at Melbourne University for a night of professional learning and networking hosted by The Mathematical Association of Victoria (MAV).

For the first hour we were lucky to learn from MAV education consultants who showed us a range of fun, simple and engaging activities we could use in our classrooms. The consultants were highly experienced Mathematics educators, so they had many tips and tricks to share and were happy to answer any questions we had about Maths teaching. We received copies of all the activities learnt – making them easier to implement in our teaching, as well as a range of extra teaching resources and materials to take home!

After this we popped over to the Queensberry Hotel where we had the opportunity to network with future maths teachers from universities across Melbourne (with free food and drink on MAV!) I really enjoyed the chance to talk to other up and coming teachers, hearing about their Uni experiences and the wisdom they have learnt from their respective courses. It was a great chance to make some connections with future, enthusiastic colleagues like myself and we're already looking forward to when we'll meet again at the next MAV event.

Thanks for hosting a practical and engaging night MAV and looking forward to the next one! - *Christiana David*

Ensuring all members have equal access to MAV services will be an ongoing focus in the future strategic plan.

During 2019 MAV also began work on a new membership strategy. This led on from the member survey done the prior year, and involved analysis of MAV's potential member base, current members and the way that MAV engages with them. Strategies have been identified that will enable MAV to further expand its touch points with mathematics educators across the state. This work will take some time to implement, but will provide positive results and opportunities to explore new membership models in years to come. This work will also flow into the next strategic plan.

LIFE MEMBERS

KEY ACHIEVEMENTS

• 3 new Life Members welcomed

At the Annual Conference in December 2019, and at MAV's end of year drinks, the MAV Board and members welcomed three new Life Members! The MAV President, Mr Michael O'Connor on behalf of the Board welcomed the Life Members and thanked them for their contributions and support for MAV over many years and decades.

Life memberships are offered only with unanimous support from the Board. The Life Membership Committee undertook significant work to propose and nominate these new life members.

Dr lan Lowe

Through his long career as a teacher/teacher educator and his association with the MAV, lan has been committed to supporting teachers in the classroom, in fostering high quality teaching and in expanding the horizons of mathematics teaching and learning, especially for students for whom mathematics is needed to support other school subjects and to keep open prospects for further education and training.

lan was a professional officer at MAV from 2005 to 2017. During this time, he wrote many books and resources that were freely published through MAV. Many of you may remember RIME (Reality in Maths Education), which is still widely recognised for its engaging activities. Ian also ran extensive professional development programs and supported schools with various needs.

lan has been a teacher, lecturer, and a mentor and support to many new mathematics educators.

Emeritus Professor Peter Sullivan

Peter Sullivan is well-known for his extensive work in initial teacher education, teacher professional learning and mathematics education research. At all times, his career

goal has been to improve the teaching and learning of mathematics. His research has had a broad impact from early childhood education to senior secondary mathematics through an extensive publication record, presentations at local, state, national and international conferences and his influential contribution to many significant committees and review panels. From 2005 to 2008, Peter was a member of the Social, Behavioural and Economic Sciences panel of the Australian Research Council College of Experts. He has also worked as Editor for the Journal of Mathematics Teacher Education and the Mathematics Education Research Journal. Peter is a past President of the Australian Association of Mathematics Teachers (AAMT), and a past Council member of the Mathematical Association of Victoria (MAV). He was the lead writer of the Australian Curriculum: Mathematics. In 2016 Peter received the Career Research Medal.

Peter continues to support MAV, running professional learning sessions and attending various events.

Professor Colleen Vale

Colleen has a long and significant history in mathematics education across both primary and secondary sectors, including as a secondary school teacher, and in relation to teacher training, research, publishing, and professional development. She has been an MAV Council member, including being President of the MAV, and has been a regular presenter at MAV conferences. Colleen is co-author of the award winning book Teaching Secondary School Mathematics: Research and Practice for the 21st Century and is well known for her professional learning programs with outof-field junior secondary mathematics teachers, research and projects with teachers on the use of technology and for her interest and work in the field of social justice in mathematics education.



New Life Members (L-R) : Peter Sullivan, Colleen Vale and Ian Lowe.

MARKETING AND COMMUNICATIONS

KEY ACHIEVEMENTS

- Matrix newsletter subscribers exceed 23,000
- New member database and email communication system implemented
- New website launched in August 2019

During 2019 MAV launched a new member database as part of an integrated association software management system. During the shift to the new system MAV transferred across all member data and contacts, resulting in a total increase of matrix newsletter subscribers of 23,000, approximately 3000 more than the prior year. This is a great outcome, with MAV now communicating with a larger cohort of mathematics educators from across the state and beyond.

The new communication system also streamlined MAV's production of newsletters, meaning that MAV staff have more control in creating, editing and sending newsletters with less reliance on external contractors. This efficiency provides a great opportunity for MAV to respond more efficiently in support of maths education.

MAV is working towards bringing in segmented newsletters which target specific audiences within our membership and maths educator base. Through 2020 we hope to see this enable MAV to target its messages more directly to those with interests in particular areas of maths education, such as primary or secondary educators.

As part of the association software management system implementation, a new website was designed and released.

This provides a more contemporary experience for those visiting MAV's website. Further work has been ongoing to improve the website navigation, access to journals for members, and other aspects as required based on feedback. Anecdotal feedback from external partners and other parties looking at our website has been very positive, with statements often indicating that our website stands above many other not-for-profits in our sector. We can always do better, but this is excellent feedback to hear.

Over time we are consistently using our brand assets to create a meaningful experience for those accessing our services. We want to create and maintain a recognisable look and feel that people are comfortable with. In 2019 MAV launched a new logo and branding for the Maths Talent Quest, to bring this into the MAV style, and to ensure a professional brand and representation in regard to this highly important program for students. The branding has appealed to our sponsors and those interested in the program, providing some clear indicators of what can be achieved by being involved in the Maths Talent Quest.

In 2019, MAV also released its first discussion paper titled 'Valuing Mathematics in Society: A Discussion Paper'. This paper outlined areas for discussion and action within mathematics education, to highlight what will be important to focus on in preparing for the decades ahead. Positive feedback was received on this paper, and the work will continue with further papers focusing on specific areas of interest as identified by the Board and members. This discussion paper is still available upon request and MAV welcomes any further feedback.



MAV's annual conference, MAV19.



MAV's new website, www.mav.vic.edu.au.

MATHS TALENT QUEST New Maths Talent Quest identity.



MATHS ACTIVE SCHOOLS (MAS)

KEY ACHIEVEMENTS

- One new 'Maths Active' school engaged during 2018, with a total of 29
- Maths Active Schools hosted and supported MAV events
- Maths Active Schools program actively supported by a Primary Mathematics Education Consultant and also now a Secondary Mathematics Education Consultant.

In 2018, one new school was accredited as a Maths Active School. Congratulations go to Croydon Hills Primary School for their hard work in preparing for their accreditation and adding value to their entire school community through a strong engagement with mathematics education.

MAV was pleased to continue its support for Maths Active Schools in 2018. Maths Active Schools are recognised for effective teaching and learning practices. Such schools place student learning in mathematics at the forefront of school business. While each school's teaching and learning is unique, the common theme is a highly effective mathematics program that promotes the depth and breadth of the subject both within the classroom, and across the school community. School support materials were released twice a year for Maths Active Schools to use within their newsletters and classroom. Our renewal process survey showed that these resources were still a highly valued asset that the school could use to continue to meet its Maths Active Schools requirements.

During 2018, support for the program internally at MAV was expanded. Ellen Corovic, who has been responsible for the program since its implementation, continues to support primary schools and is taking a high-level view of the entire program. To ensure that we continue to evolve the program to be suitable for secondary schools, MAV's newly appointed Secondary Mathematics Education Consultant, Danijela Draskovic took responsibility for much of the year for the content and delivery of the program within secondary schools. We hope that this approach will allow us to expand and tailor the program to engage with more secondary schools. Currently the majority of schools engaged are primary schools, although we believe there is much potential for further reach.





PROFESSIONAL DEVELOPMENT

COMMITTEE MEMBERS

Peter Karakoussis (Convenor), Johnson Alagappan, Elizabeth Burns, Claire Delaney, Kerryn Driscoll, James Mott, Duncan Symons, Helen Haralambous (Executive Officer).

MAV's professional learning (PL) is focused in four key areas:

- In school professional learning, including consulting
- General professional learning across all levels, including online and face to face sessions,
- VCE professional learning program
- Specialised conferences:
 - Primary Mathematics Education Conference, in partnership with Melbourne University Graduate School of Education, attended by 130 leaders on day 1 and 170 teachers on day 2
 - New Frontiers of Learning Conference, in partnership with Independent Schools Victoria attended by 95 primary and secondary teachers from across Victoria and not limited to the independent sector
- Regional conferences, in 2019: Horsham P 10 Mathematics Education Conference, held Horsham and West Haven Primary School and was attended by 110 primary and secondary teachers from the region.

IN-SCHOOL PROFESSIONAL LEARNING

KEY ACHIEVEMENTS

- 220 days of primary and secondary mathematics professional learning delivered in school, across 37 schools, consulting generating over \$232,000 in income
- MAV Education Consultants (MECs) and contracted primary consultants were engaged to run professional learning workshops in schools, at all levels, from all sectors and from all regions.

Mathematics Education Consultants (staff and external consultants working on behalf of MAV) delivered the equivalent of 220 days of mathematics professional learning with the majority of these being consulting in primary schools. These include schools requesting the minimum 1.5 hours to half day or full day, with several schools requesting multiple days. Consulting work covered from early years and primary settings with a focus on building teacher capacity, up to programs specifically for VCE teachers.

The MAV Consultants have worked diligently to create a supportive network of contracted consultants, providing training and ongoing support to all those delivering professional learning on MAV's behalf. This ensures schools

therefore receive quality professional learning packages that are specifically tailored for the individual requirements of each school or network.

GENERAL PROFESSIONAL LEARNING

KEY ACHIEVEMENTS

- Participation included over 2000 mathematics educators, an increase in participation on the prior year
- Continued expansion of the range of topics offered appealed to a wider member base, including regional educators
- MAV Education Consultants and contracted specialist consultants delivered training on a variety of topics, across all levels and included webinars.

The following lists a number of sessions delivered by MAV during the past year:

F - 10

- Evidence-based resources to support mathematical reasoning in Years 5 to 10
- Formative Assessment: the key to improving learning outcomes in mathematics F to 9
- Inquisitive, Inspiring Warm-Ups
- Integrated STEM

Primary

- Critical and creative thinking through mathematics reflections
- Making connections between Problem Solving and Mathematical Proficiency
- Primary Mathematics: Engaging Teachers and Engaging Students
- Structuring lessons and sequences to challenge and engage all students
- Maths300: How to use (website and software)? Why?
- Maths300: Taking It Further
- Mental computation: a priority in Victorian primary schools?
- Investigative Approaches

Secondary

- The Secret is out! Fast and Efficient Exam Solutions
- Introduction to Coding with the TI-Nspire™
- TI-Nspire[™] CAS for Beginners
- Using MS Excel for basic coding and data manipulation
- Challenging students to think
- VCE Review Forum Stage1 Maths Review



Mini-conferences

The following one-day professional learning events were held for F to 10 teachers, offering a wide variety of workshops:

- Horsham Mini conference: "Incorporating the big ideas and mathematical proficiencies to challenge student thinking". The keynote was Marj Horne, followed by a variety of workshops from MAV primary mathematics education consultants (Jen Bowden & Ellen Corovic) and Sharyn Livy. This conference was organised in collaboration with Independent Schools Victoria (ISV), hence secondary workshops were presented by Deb Carmichael (ISV), along with Marj Horne. The conference was attended by 110 teachers from the region.
- Regional conferences are held each year each year, alternating regions. This was a first for Horsham, building on the model set previously for Mildura and Gippsland. For 2020 further events are planned in different regions as we rotate across the state.
- 'New Frontiers of Learning'; a new one-day conference in collaboration with Independent Schools



Victoria (ISV) and hosted at Independent Schools Victoria in West Melbourne. The keynote was Chris Harte, followed by a variety of workshops from MAV primary & secondary consultants (Jen Bowden & Danijela Draskovic) & various other presenters from both ISV and MAV contracted consultants. The conference also included small group discussion topics as alternatives to mainstream workshops. The alternative format was very successful and was attended by 95 teachers. This event also allowed MAV to increase its reach within the independent schools' sector, although the conference was open to anyone from any sector. Due to its success the conference will run again and will become a core part of MAV's professional learning program.

Delegate feedback

• A brilliant event that allowed networking, sharing and learning.

It is highly recommended for teachers at any stage of their career. The keynote was fantastic and engaging.

• It was truly enlightening to listen to and collaborate with other leaders of numeracy from around Melbourne. There were great ideas related to emerging technologies and the future of mathematics teaching and learning. Seminars like these are so vital to staying flexible and competent in the field. Great job MAV and ISV! We need more of these seminars.

VCE PROFESSIONAL LEARNING

KEY ACHIEVEMENTS

- Total attendees at VCE events for 2019 was 987
- Three whole day VCE PD days, with a total of 399 attendees, at:
 - Melbourne University (270)
 - La Trobe University, Bendigo (81)
 - Federation University, Gippsland (48)
- Four after school SAC workshops, with a total of 203 attendees, at:
 - Terang (13)
 - Lalor (50)
 - Burwood Methods (56)
 - Burwood Further and Specialist (84)
- Seven after school Meet the Assessors workshops, with a total of 385 attendees, at:
 - Geelong (45)
 - Horsham (21)
 - Williamstown (100)
 - Burwood Methods (74)
 - Burwood Further and Specialist (112)
 - Wangaratta (22)
 - Terang (11).

Whilst overall figures were slightly lower than the previous year, the VCE PD workshop series has continued to be very successful for the MAV, being highly in demand from members and non-members. The Bendigo VCE PD day had a significant increase from the previous year and the move of the Northern suburbs SAC evening from Thornbury to Lalor also contributed to a significant increase for the Northern suburb's venue.



PRIMARY MATHEMATICS EDUCATION CONFERENCE

KEY ACHIEVEMENTS

- Strengthening of leadership day theme and structure
- Expansion of early childhood inclusions
- Increase in delegates for third year running with day 2 reaching capacity
- Positive feedback on sessions and engagement
- Strong financial outcomes including expanded sponsorship income with the Victorian Department of Education and Training as Major Sponsor a third year.

At the end of term two 2019, MAV held its third Primary and Early Childhood Mathematics Education Conference in collaboration with the Melbourne Graduate School of Education (MGSE) at The University of Melbourne. The event was again a success with an increased number of delegates (Leadership day: 120, teacher's day: 162).

The program is a major event on the MAV professional learning calendar. Speakers from both MAV and MGSE are selected and provide links from research to practice and resources and ideas to implement within school environments.

The 2019 theme was:

- Leadership day: leading whole school improvement in mathematics education
- Early childhood and primary teacher's day: improving classroom-based learning.

Key changes in 2019 included strengthening the leadership day to ensure sessions targeted the needs of leaders in primary schools including principals, assistant principals, numeracy leaders and others interested in mathematics leadership.

Further, MAV strengthened the early childhood strand on each day, with new presenters and session topics, providing a



clear pathway for early childhood educators to set their own program on the day. This included a new keynote focused on early childhood; Engaging community and family in your mathematics program delivered by Jen Bowden.



MAV thanks the staff of Melbourne Graduate School of Education for their partnership in delivering this event. MAV also thanks the DET as the Major Sponsor for their support in making this event such a success.





Education and Training

Delegate feedback

- MAV Primary Conference is fantastic professional development for primary school Maths coordinators and primary school leaders.
- MAV conferences and resources never fail to engage, inspire me and improve my confidence and practice.
- This was a day of wonder. Time to reflect, learn, digest and think about what I have learnt I am going to apply in my classroom first!
- I was privileged to attend both days of the June MAV Conference. So many practical ideas given during the Keynotes and the Workshops...looking forward to taking them back to school staff and having them implement these in their classrooms. As a Lead Mathematics Teacher, I heard many ideas and strategies for improving mathematics teaching and teacher pedagogy across the school that can be easily implemented.
- Inspiring, relevant and authentic. Thank you MAV for providing a conference that was engaging, reflective and evidence based research to improve practice.



Over 180 maths leaders from 39 primary schools completed 5 days of professional learning in 2019.

MATHEMATICS COLLABORATIVE

KEY ACHIEVEMENTS

- MAV and MGSE collaborate to expand their impact
- Schools successfully engaged and continuing in 2020 with their implementation projects

39 primary schools from across the state signed up to participate in a two year program which kicked off with a 2 day professional learning session in early 2019. A further three professional learning days were held across the year each with approximately 190 primary mathematics educational leaders in attendance.

Schools send representative leadership teams, and develop their maths leadership, content and pedagogical content knowledge in a structured way.

The program assists schools in the development of a clear and practical focus on school improvement, the tools and techniques to implement and measure improvement, a practical understanding of the structures to support improved practice by working collaboratively within their school, and a deep understanding of the maths proficiency strands and the teaching practices to support student development in mathematics.

Each school also received two days of in-school consulting delivered by MAV consultants to support their ongoing implementation and change program.

The initiative has been highly successful, with staff from both MAV and the Melbourne Graduate School of Education collaborating in delivery. Formal evaluation of the program outcomes is being undertaken by The University of Melbourne to prove the efficacy of this program.

OTHER PROFESSIONAL LEARNING EVENTS IN 2019

ESCHER X NENDO – Between Two Worlds exhibition - A Special event for Mathematics Educators! Held at the National Gallery of Victoria. With guest speaker Associate Professor Katherine Seaton.

Learn and chat: Pre-service teacher networking event at Melbourne University hosted by MAV Education Consultants (See page 6).

MAV19 ANNUAL CONFERENCE: MAKING + CONNECTIONS

COMMITTEE MEMBERS

Ann Downton (Convenor), Dr Leicha Bragg, Kate Copping, Trish Jelbart, Thomas Moore, Max Stephens, Leigh Thompson, Danijela Draskovic, Peter Saffin, Jacqui Diamond (Executive Officer).

KEY ACHIEVEMENTS

- Increase in conference delegates
- Outstanding program and range of keynote presenters
- Improved communication through use of social media and marketing strategy
- Live recording of selected keynotes
- Increase in profit beyond that forecasted
- Improved professionalism of conference
- Improved catering

The 56th (MAV19) annual conference Making +

Connections held at La Trobe University on December 5 and 6 2019, was an outstanding success. As a committee we considered this theme provided a strong message and sense of connectedness among mathematics educators as we work collaboratively across schools, with universities, industry partners and various other stakeholders to develop educators' breadth and depth of knowledge for teaching, including knowledge of curriculum and knowledge of how students learn.

Making connections will ensure both rigour and innovation

and provide opportunities for increasing impact in mathematics education; and is crucial to the success of mathematics education in the future.

Our main goals were to increase paying delegates and profit as well as improving the experience for attendees, particularly catering and parking. We had a total of 1564 participants over the two days, which was an increase on 2018 (1526). The total comprised of:

- 1384 paying delegates and presenters
- 46 complimentary registrations (including sponsored regional delegates)
- 122 exhibitors
- 6 volunteers, and
- 6 administration staff

We had a target of 1460 paying delegates for MAV 19, so we were short by 76. However, due to increased sponsorship including new annual partner (ANZUK) and reduced spending compared to budget, we achieved a higher than targeted profit. This was particularly pleasing given we had a shortfall in 2018. This is an area we will continue to work on in the future, particularly as we had a small reduction in exhibition income, a trend that has continued from 2018.

There was a decrease in one-day registrations across metro, non-metro, non-member, student, and presenters, compared to 2018. However, there was an increase of two-day registration for metro, non-metro, and students.

KEYNOTE	YEAR LEVEL	TITLE
THURSDAY 5 DECEMB	ER	
Mike Askew	F - Y8	Reasoning as a mathematician
Jill Cheeseman	F - Y2	Learning from children
Geoff Masters	All levels	Connecting teaching with student readiness
Kate Smith-Miles	Y7 - Y12	Mythbusting mathematics
Panel	Y7 - Y12	What's up with secondary school mathematics, and how can we improve it
FRIDAY 6 DECEMBER		
Mike Askew	F - Y8	Big ideas: Connecting within and across the mathematics curriculum
Janette Bobis	F - Y4	Challenge and enjoyment: Getting the right balance in primary mathematics classrooms
Hilary Hollingsworth	All levels	Mathematics teaching, learning, assessment and reporting: Time to join the dots
Greg Oates	All levels	Intuition and cognitive conflict: From 'Oh-Oh to Ah-Ha'.

ANNUAL SPONSORS









The non-metro sector attendance saw an increase of 76 delegates (up 36% from 2018), which was attributed to the reduced cost for their registration for MAV19.

We also saw a continued decrease in the presenters at MAV19, as a result of less options submitted and less sessions having more than one presenter. The presenter fee (introduced in 2017) may also be a contributing factor to the declining number of co-presented sessions.

The early-bird rate introduced in 2016 was again promoted in 2019 but was only taken up by a small number of delegates. As a committee we decided to keep registration fees for delegates at 2018 prices, with the exception of the non-metro sector, as well as to continue the inclusion of the cost of the daily parking in the registration (initiated in 2018), and to retain the presenter fee of \$89, introduced in 2017.

Keynote speakers were reduced to five per day, with a panel introduced as one of the Keynotes on Thursday. Keynote speakers were selected for their expertise in early years, primary, secondary, or across all levels and linked to a key aspect of our conference theme 'Making + Connections'. Our International speaker this year was Mike Askew, Professor of Mathematics Education at the University of the Witwatersrand, Johannesburg, who presented a keynote each day. We acknowledge the support of the Department of Education and Training (DET), Victoria, as sponsors of this keynote. The keynotes and focus of their presentation are presented in the table on the previous page.

The keynotes provided a mix of current research, thought provoking ideas and practical implications for teacher practice. The feedback from delegates was positive and many commented on how much they enjoyed the range of presenters.

Again this year we received funding through the Strategic Partnership program (DET) to video record two keynotes (Kate Smith-Miles on Thursday & Mike Askew on Friday). Since being released these video recordings have received significant numbers of hits.

MAV was privileged to have a wide variety of presentations for our delegates to attend and as was the case last year there were first time presenters at MAV19, which was exciting to see and encouraging for the future. In addition to the 9 Keynotes there were 250 sessions across the two days offered to our 1384 delegates. Initially there were 315 sessions advertised in the synopsis, but due to a range of reasons 65 presentations were cancelled. While the number of sessions advertised was less than last year (342), we are continuing to attract new presenters. Moving forward, we are working towards providing prospective presenters with clearer guidelines when they submit their options, and a tighter review process of the options.

Delegate feedback

- Mike was a fabulous speaker. He had a great mix of theory and practical wisdom with a nice dose of humour and real warmth towards the audience.
- Mike was a very competent speaker and was both entertaining and informative. It was very thought provoking and left me wanting to follow up on his strategies.
- Outstanding keynote speaker who engaged the audience with anecdotes and humour.
- Kate is an amazing role model, highly motivating and inspirational.
- As someone who struggles to integrate real life examples and anecdotes into my teaching, I thought Kate's presentation was fantastic. Not only did she motivate me as a mathematics teacher, but also now I can also provide examples to my students as well.
- Panel presentation was excellent.
- Hilary's presentation was informative and engaging. Immediately applicable.
- Greg's session was great. Well-paced and relevant to the issues for mathematics teachers.

Presenters were invited to contribute a paper to the Conference Proceedings and to increase the number of papers we again offered a mentoring process, which was taken up by three new presenters. The Proceedings was produced online, and the format reflected the Conference theme and style of the MAV publications. I am extremely grateful to Jennifer Hall and Hazel Tan (Editors) and their team from Monash University mathematics education staff for giving their time and expertise to undertake the editing of the MAV19 Proceedings. Louise Gray from Stitch Marketing who produced the final online product indicated that they were terrific editors to work with and completed everything in a timely manner. Thanks to the team of reviewers, both internally and externally, for their thoughtful and professional feedback to the authors. Moving forward, the committee needs to consider the viability of the Proceedings, given the decline in the number of papers, and cost, relevance and time involved to produce it.

We continued to focus on our marketing strategy implemented in 2017 to increase the professionalism and raise the profile of the conference and increase the number of delegates. The theme of MAV19 was launched at MAV18 Happy Hour, and we began marketing 10 months prior to the conference using E-Newsletters, advertisements in *Common Denominator*, MAV social media and the conference website.

MAV19 ANNUAL CONFERENCE



MAKING + CONNECTIONS MATHEMATICS NUMERACY



S-6 DECEMBER





This strategy will be adopted again in 2020, with some minor changes including the use of an Events App being planned. Working with the new Events team at La Trobe University and improved technical support also contributed to the success of the conference. My thanks go to Jacqui Diamond and her team in the office for all their work and for continuing to explore creative ways to promote the Conference each year.

Delegate survey responses indicated that the majority of the respondents rated the conference content, registration process, parking, and food and beverage as excellent or very good. Based on delegate feedback we will continue to implement new initiatives to improve the conference experience for all in 2020.

As I indicated earlier, the conference exceeded our forecast budget by \$54,734.19, which was largely due to the increased sponsorship and the reduced spending. As a committee we will continue to work to increase the number of delegates and ways to minimise costs in order to achieve our targets. This may include exploring ways to target the age demographic of teachers (under 30 to 40) as they are less representative at the conference than those 50 and beyond.





Delegate feedback

- A really great conference. Organisation wise you do a great job! Registration, communication along the way and info on site is great.
- A fantastic conference a very, very big thank you to the organisers.
- Parking was amazing. Thank you for making it so easy.
- Thank you again for providing an opportunity for enthusiastic facilitators and participants to gather in one place! My only suggestion is to somehow improve the location of morning tea.

I sincerely thank Jacqui Diamond (Events Manager) and Peter Saffin (CEO), our hard-working conference committee, and MAV staff for their time, expertise, enthusiasm and effort in developing an outstanding program. My thanks also to all the presenters who committed their time, energy and expertise to presenting such high quality and thoughtprovoking sessions. It was indeed a privilege to be Convenor of this committee.

- Ann Downton, Convenor

STUDENT ACTIVITIES

COMMITTEE MEMBERS

Claire Delaney (Convenor), Janeane Anderson, Kelly Gallivan, Mark Gleeson, Jane Lockwood, Allason McNamara, Lauren Newton, June Penney, Andrew Nordhoff, Kylie Slaney, Jennifer Bowden (Executive Officer).

MATHS TALENT QUEST

KEY ACHIEVEMENTS

 A total of 570 entries from 60 schools across Victoria and Tasmania were submitted into the 2019 Maths Talent Quest



- Judges from across Australia came to the MAV office to participate in judging the National Maths Talent Quest competition
- There were 21 Victorian entries into the National Competition with 5 of these entries winning first place at the national level.

The annual Maths Talent Quest (MTQ) Awards Ceremony was held at La Trobe University on the 17th October 2019. The ceremony awarded and celebrated the achievements of students receiving distinctions, high distinctions, special and national awards. With approximately 350 students, supported by their families and teachers, we highlighted excellence in mathematical inquiry. We were entertained by Felstead Education who presented their new show "Maths in Sport". The audience was highly engaged in this high impact and thought-provoking show highlighting and comparing fascinating world records. https://www.felstead.com.au.



The Maths Talent Quest is run within Victorian schools as an inquiry-based project. Students may either complete their projects individually, in small groups, or as a class. From this, the best 6 entries per year level for each category are entered in the state Maths Talent Quest to be judged by a large number of teachers and pre-service teacher volunteers. The MAV Student Activities Committee would like to take this opportunity to thank all the teachers, volunteers and MAV staff who have dedicated their time to making Maths Talent Quest a success in 2019.

The judging for national MTQ was hosted by MAV in 2019. The introduction of the management system Coresoft added some levels of complexity to judging and we hope to iron these out in 2020. We would like to thank the volunteers from Melbourne and across Australia who meet at MAV to complete collaborative judging. The National MTQ continues to grow in strength and will be hosted by MAWA in 2020.



COLLABORATE





INVESTIGATE

MANGAHIGH



WORK LIKE A MATHEMATICIAN

MTQ SPONSORS





VCE REVISION LECTURES

KEY ACHIEVEMENTS

- High attendance, with over 875 students participating state-wide, with positive feedback received
- Lectures held in all four regional areas and five metropolitan locations (Sale, Horsham, Wangaratta, Yarra Valley, Glen Waverley, Taylors Lakes, Mt Eliza, Scoresby and Broadmeadows)
- Increase in group bookings by schools
- Venues with highest attendance were Scoresby (230 attendees at 3 lectures), Mt Eliza (123 attendees at 3 lectures), Taylors Lakes (175 attendees at 3 lectures) and Glen Waverley (129 attendees at 3 lectures)
- Quality of the revision booklets provided to students was improved drastically as we sourced a new printing supplier.



The VCE Revision Lectures provide an 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 current VCAA assessing experience (in the

study presented). Attendance was significantly higher than in 2018, when under 800 students attended.

Scoresby was a new location for the Knox school network in 2019. This had predominantly large group bookings from the 5 key secondary schools in that area and came about from a request from the VCE network in that region. It was supported by the Principals and Mathematics Coordinators in the network.

Glen Waverley bookings were significantly reduced from previous years. This is likely due to a change of leadership at the school. The coordinator of the VCE Revision Lectures at Glen Waverley has said to MAV staff that they don't make it a compulsory activity (as they once did) and only really encourage students who don't study well independently to attend.

MATHS GAMES DAYS/FAMILY MATHS

KEY ACHIEVEMENTS

- The MAV supported 13 Maths Games Days across Victoria
- A total of over 2000 students participated
- MAV continued to streamline sponsorship, exhibitions and donation of prizes for these days to reduce the workload on teachers and increase quality of the prizes delivered. This added to the opportunity for our sponsor to meet with teachers and increase the financial position of Games Days for MAV
- 2 new venues running Games Days introduced in 2019.

We welcomed Derrimut Primary School who hosted a successful Year 3 Games Day and MAV also hosted a very successful Year 11/12 Games Day at RMIT. This was run by our Education Consultants Helen Haralambous and Danijela Draskovic. The MAV Secondary Education Consultants were also contracted to present a regional Maths Games Day, including for Year 8 and 9 students in the Gippsland region (in partnership with Federation University).

The Games Days are extremely popular with most days having full registrations. Rigorous activities addressing the proficiency strands across the Victorian Curriculum are played as problem solving tasks, and games are completed by teams of four. MAV thanks and congratulates our school hosts for running fantastic events that challenge students!

In 2019, schools continued to follow a model of running their own Family Maths Nights and school-based student activities. MAV consultants have been able to support both metro and regional teachers to build their capacity to create and run family and student-based activities in their school through online professional learning and MAV published resources.



Year 7 Games Day at Genazzano FCJ College in Kew.

GIRLS IN STEAM

KEY ACHIEVEMENTS

- Broad range of speakers provide a variety of opportunities to consider careers in STEAM.
- Hands-on activities reintroduced, and provided by two sponsors
- Ford continued as Gold sponsor for 2019



MAV's Girls in STEAM event is designed to share stories from women who are paving the way for students to flourish in STEM careers. This event explores females in STEAM careers with an emphasis on the importance of mathematics required for success. Students heard from leading industry experts in a range of fields about their experiences working in a STEAM focused career including:

- Sarah McNab, Director of General Medicine, Royal Children's Hospital
- Monika Janiak, Senior Environmental Scientist, GHD
- Chivonne Hollis, Executive Manager, SORA Interior Architecture & Design
- Beth van Vliet, Vehicle Architecture Engineer, Ford Motor Company
- Kim Stoddart, General Manager Director, Quantum Market Research
- Pandora Hope, Principal Research Scientist, Bureau of Meteorology
- Gem Lloyd, Bureau of Meteorology

An interactive panel discussion followed the individual presentations. Students then participated in two hands-on activities that required curiosity and creativity. Each student experienced both of the following activities:

Start your engines!

The TI-Innovator[™] Rover is a programmable robotic vehicle that drives conceptual curiosity



in mathematics, science and coding. It provides opportunities to achieve important goals and outcomes valued in STEAM focused learning. In this workshop, students applied their knowledge of motion, particularly their understanding of the relationships between distance, speed and time to code the Rover in an exciting race to the finish line!

This session was made possible due to the support of Texas Instruments.

Engineers Without Borders

A creative, hands-on workshop was developed by Engineers without Borders, and designed to open students' minds as they are challenged



with the task of creating appropriate and sustainable housing in developing nations.



PUBLICATIONS

COMMITTEE MEMBERS

Louise Gray (Stitch Marketing), Terence Mills retired Nov 2019, Michael Minas (Editor, Prime Number) commenced Oct 2019, James Russo retired Nov 2019, Roger Walter (Editor, Vinculum), Ellen Corovic (Executive Officer), with support from Michael O'Connor

JOURNALS

KEY ACHIEVEMENTS

Prime Number

- A special games edition of *Prime Number* was published and was very well received by teachers
- New editor Michael Minas was appointed following James Russo stepping down.

Vinculum

- This year a new series started focusing on financial mathematics, in particular the issues of taxation and superannuation
- Continued with previous year's focus on mathematicians, past and present
- Regular contributors (Passionless moments, Chess, Maths Treats) continue to submit quality articles
- The editor is pleased with the number of authors, the quality and relevance of their contributions, and that many authors have written multiple times.

Common Denominator

- Contributions have been driven by teachers from MAV's member base submitting content for consideration
- Several high-profile mathematics educators submitted articles to *Common Denominator*, which has further enhanced the reputation of the magazine as a publication offering quality content
- Three-part series covering CAS calculators was contributed by Casio and TI which provided specific content for the VCE years.

Quarterly meetings were conducted with a focus on matters related to the publication of the Association's magazine *Common Denominator* and journals, *Prime Number* and *Vinculum*. These meetings have provided an opportunity for the editors, MAV staff member and committee volunteer to discuss issues related to the publications and look to constantly improve the process and content. This may include feedback on previous editions, support for future editions, article submissions and consistent styling.

Common Denominator is a magazine whose purpose is to highlight MAV, its events and activities, resources and the value of the work the Association does in promoting Mathematics in Society. This magazine is available to all











members in hard copy and is also freely available online to non-members.

The purpose of *Prime Number* (Primary) and *Vinculum* (Secondary) is to provide educators with support in their practice as professional teachers, to demonstrate and expose exemplary practice, new ideas and approaches, teaching strategies and pedagogy, providing practical tasks, and to show how research is translated into practice to improve teaching and learning. These journals are available to MAV members in print and digital forms quarterly.

James Russo retired as Prime Number editor after the

completion of the 2019 Term 4 edition. James provided a great balance between research and practical classroombased activities during his two-year term as editor. MAV would like to thank James for his contribution and support during this time. Michael Minas has taken over as editor with his first edition being very well received.

These publications are mailed to member schools and individuals at the commencement of each term as part of their membership benefits and are also available in digital versions through the website. These journals are great vehicles for promoting mathematics education, MAV's activities and provide revenue through commercial advertisements.

In the 2019 – 2020 year the Publications Committee reviewed and clarified its publications policy. This process supported the committee to further highlight and document MAV's publications purpose and audience, ownership and management, article submission process and advertisement stance.

In addition, the Publications Committee participated in a review of the operational and strategic running of the group. The review strongly indicated that quarterly meetings of the journal editors and MAV staff member are critical from all viewpoints. These meetings are an opportunity for each participating individual to ensure that MAV's vision and voice is consistent in delivery, balanced and connected to MAV activities and strategic intent.



MAV SHOP

KEY ACHIEVEMENTS

- 27 new products were added to MAV Shop offerings
- Sales at the 2019 Annual MAV Conference again exceeded \$14,500
- MAV Publication fliers were revised for consistency
- Revenue increased to \$262,419.08 in 2019, up from \$250,421 in 2018

MAV Shop continues to support members and non-members through curating stock that is purposeful, dynamic and current to teacher practice. Teacher resource books that focus on developing pedagogical content knowledge (e.g. Teaching Mathematics: Foundation to Middle Years and Visible Learning for K-12), support materials for teaching content (e.g. Dr Paul Swan resource books and Challenging Mathematical Tasks) and picture story books are key features of MAV Shop's offerings. The picture book collection is a key feature of MAV Shop with 69 titles currently on offer. A flier mapping all MAV's stocked picture books aligned with the Australian Curriculum is a very popular document with teachers. MAV publication Common Denominator frequently showcases MAV stock through book reviews, or lesson studies. These articles support teachers in understanding how to use the resource as well as promoting MAV shop.

Advertising through MATRIX newsletter, *Common Denominator*, satchel inserts, fliers at PD events and on MAV's Facebook page continued throughout 2019. These campaigns were strategically designed to direct teachers' attention to the range of products at the MAV Shop. Sales often increase following these marketing campaigns.

MAV Shop's presence at the Annual Conference continues to be a great success. This year due to new software and point-of-sale systems staff requirements for this pop-up shop were halved, creating a saving for MAV. Our new systems will also enable us to run efficient physical shops at other events in future. The location and size of the shop at MAV annual conference assists MAV in showcasing and prioritising this service. Other smaller scale pop-up shops were held at the Early Childhood and Primary Conference, regional conferences, the Education Show and Future Schools Expo along with a handful of smaller events. Sales at these events are limited, however it is another opportunity MAV uses to promote our services and the MAV Shop.



MADE BY MATHS

KEY ACHIEVEMENTS

- Downloads are comparable with previous years at around 1000 units
- Anecdotally the number of downloads appears to be linked with La Trobe University activities
- Teacher notes for the use of the app were redesigned.

MAV's Made by Maths app has continued to be available for free on iOS and Android devices in 2019, without any further investment in technological upgrades. La Trobe University, Bundoora campus has advertised the app on the Starportal Facebook page, and this was shared on the MAV Facebook page.

There are five walks currently over four locations:

- Federation Square and Swanston Street
- La Trobe Melbourne, Bundoora Campus
- Melbourne Cricket Ground, National Sports Museum
- Explore your world, any school grounds







PROJECTS AND PARTNERSHIPS

MAV partners with various mathematics education providers, government authorities and interested parties to deliver a range of products and services each year. MAV also receives sponsorship and support from various parties.

To all other organisations that funded MAV, sponsored our events and services, or provided in kind support in various ways, MAV says 'thank you' and we look forward to working with you again in the future.

Many of these organisations are mentioned throughout this annual report.

The following highlights a few key areas of focus and partnership work that took place in 2019 not mentioned elsewhere:

VICTORIAN DEPARTMENT OF EDUCATION AND TRAINING

SPECIAL PARTNERSHIP PROJECTS MATHS CAMPS

KEY ACHIEVEMENTS

- 24 students attended from regional Victoria
- New and existing industry partners consolidated the camp as an exceptional student experience
- Focus on real-world projects is extremely popular with students.

During the first week of the July 2019 school holidays, 24 Year 10 students from rural and regional Victoria took part in an enriching industry-based mathematics camp in Melbourne.

The camp run by The Mathematical Association of Victoria (MAV), was made possible via funding from the Victorian Department of Education and Training's Strategic Partnerships Program hence participating students attend at no cost.

'High potential' students are provided with the opportunity to work with mathematicians and industry representatives, solving real-world maths problems in teams. The students are selected via a competitive application process and gain a hands-on experience and insight into careers in STEM industries.

Students expand their mathematical skills with the support of industry representatives from each partner, while developing 21st century skills as required in the workplace including communication, presentation, teamwork, critical and creative thinking, and problem solving. Students also visit each industry workplace and undertake a series of tours and investigations to explore careers in each industry.

In 2019 MAV partnered with Ford, The Reserve Bank of

Australia (RBA), Texas Instruments, and the Victorian Space Science Education Centre to create real world mathematics investigations in the fields of Engineering, Economics/ Commerce, Coding and Biomedical research.

Groups of 5 students had 4 days to undertake problem solving activities as they worked through a scenario presented to them at the beginning of camp. Students received mentoring by mathematicians from leading universities, including RMIT and La Trobe Universities.

The camp culminated with the students undertaking a tour and problem-solving activities at La Trobe University Bundoora, before presenting their project findings to MAV staff, industry partners, university academics invited guests and parents.

MAV has been running the camp for 4 years and during this time students, parents, academics and industry partners report on the stimulating, team and knowledge building experience for students.

As one student participant summed up the experience "The camp is one of the best experiences I have participated in so far. As well as exposing me to an investigation that I would not be offered otherwise, it gave me an opportunity to experience activities that gave me an idea as to where maths can lead me in the future. I also was given the opportunity to make friends with people who have the same interests as me and can give me a different perspective on things I wouldn't have thought of otherwise. Thank you so much for providing me with a great experience that I will remember forever."

Funding and industry partners



ONLINE PROFESSIONAL LEARNING KEY ACHIEVEMENTS

- Six primary and six secondary virtual learning sessions were held during 2019
- Six keynotes were recorded and made available to mathematics educators
- Keynotes recorded at primary and early childhood mathematics education conference for the first time
- Successfully engaged educators from across the state, with an increase in regional educator attendance at virtual sessions.

MAV hosted a variety of virtual learning sessions with staff and external presenters covering a range of relevant topics. Attendance was strong including in some cases schools joining as part of a faculty meeting. MAV supports this approach as it helps build knowledge in teaching teams and creates opportunities for professional learning for maths faculties as opposed to individuals. We plan to promote this approach in future as we continue to expand our virtual learning sessions that are available.

The recording of keynotes was again extremely successful in 2019, with videos receiving hugely increased numbers of hits compared to the previous year. Keynotes recorded at MAV19 annual conference include Mike Askew, Big ideas, connecting within and across the mathematics curriculum and Kate Smith Miles - Myth busting mathematics. At the primary conference recorded keynotes included Associate Prof Robin Pierce, Associate Prof Wee Tiong Seah, Jennifer Bowden (MAV), and Dr Duncan Symons.

Funding for this project will finish at the end of 2020 although MAV will be applying for further funding under SPP to continue this work.

OTHER PARTNERSHIP WORK

TECH SCHOOL LEARNING ADVISORY PANEL

Peter Saffin (CEO) continued to attend a number of Tech School Learning Programs Advisory Panel meetings throughout the year with other panel members including representatives from DET, VCAA and other selected subject associations and industry representatives.

Presentations were made to the panel by the leaders of various Tech Schools, explaining their pedagogical approach and program information. Feedback to each Tech School was supportive and designed to add value to programs, enabling Tech Schools to evolve their programs over time with constructive feedback. Feedback is informed by the Tech Schools Learning Program Design Framework and by each person's respective areas of expertise.

VICTORIAN MATHS CHALLENGE

MAV provided some further support for the Victorian Department of Education and Training in regard to the Victorian Maths Challenge, and home learning resources. Feedback was provided to support the development of some resources aligned to using the Infinite Voyage app, which MAV previously supported.

MIDDLE YEARS LITERACY AND NUMERACY SUPPORT (MYLNS)

The Middle Years Literacy and Numeracy Support (MYLNS) initiative provides funding to government secondary schools to improve outcomes for students who are at risk of finishing school without the literacy or numeracy skills they need for future work, education and training.

Through the MYLNS initiative, schools are provided funding to release existing teachers as Literacy Improvement Teachers and/or Numeracy Improvement Teachers. In a small number of cases, schools may instead have access to a Network Teacher who works across up to four schools in place of a Literacy or Numeracy Improvement Teacher.

In September 2019 MAV was approached by the Victorian Department of Education and Training in regard to delivering professional learning for year 10 teachers working with students below national minimum standards in numeracy. This resulted in MAV producing a two-day program for teachers who are supporting students, in regard to developing numeracy interventions. MAV delivered this two-day program in 14 venues across the state during term four.

After completion of this work MAV submitted a successful tender to continue this work in 2020 and beyond, as part of a consortium led by Valad Solutions.

VCAA

MAV has collaborated with VCAA in regard to supporting the VCE curriculum review. The CEO was engaged as part of the expert review panel for mathematics, as well as on the further mathematics review panel.

MAV organised a feedback and consultation session with VCAA to gain member and maths educator input on the VCAA mathematics review papers that were released in early 2019.

The CEO was also involved in the GAT Numeracy Redevelopment Project, as part of the Reference Group.

MAV is pleased to be able to continue to collaborate with VCAA, including being a critical friend in relation to representing members and their views as required.

THE MATHEMATICAL ASSOCIATION OF VICTORIA

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 JANUARY 2020 ACN 004 892 755

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ACN 004 892 755

Directors' Report

31 January 2020

The directors present their report on The Mathematical Association of Victoria for the financial year ended 31 January 2020.

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 Claire Delaney Qualifications	Teacher
Dr Ann Downton Qualifications	University Lecturer
Ms Patricia Jelbart Qualifications	(Appointed on 21 May 2019) University Lecturer, Education Developer and Consultant
Mrs Kate Copping Qualifications Special responsibilities	(Appointed 4 September 2018) University Lecturer Vice President
Dr Dan Cloney Qualifications	Senior Research Fellow
Ms Michaela Epstein Qualifications Special responsibilities	Mathematics Education Specialist President/Immediate Past President
Mrs Louise Gray Qualifications	(Appointed on 4 September 2019) Marketing/Sponsorship
Mr Peter Karakoussis Qualifications	Teacher
Ms Allason McNamara Qualifications	Teacher
Mr Thomas Moore Qualifications	(Retired on 21 May 2019) Post Graduate Student/Consultant
Mr Michael O'Connor Qualifications Special responsibilities	Schools Outreach Manager Vice President/President
Mr Juan Ospina Leon Qualifications Special responsibilities	Teacher Treasurer/Chair of Finance Committee

ACN 004 892 755

Directors' Report

31 January 2020

1 General information

Information on directors

Ms Kylie Slaney	
Qualifications	Teacher
Mr James Spithill	(Retired on 21 May 2019)
Qualifications	Research fellow
Special responsibilities	Immediate Past President
Dr Max Stephens	
Qualifications	University Research Fellow

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 2020 the collective liability of members was \$40,900 (2019: \$29,080).

ACN 004 892 755

Directors' Report

31 January 2020

2 Operating results and review of operations for the year

Operating results

The profit of the Company amounted to \$150,135 (2019: \$35,939).

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

Post the audited financial period, COVID-19 became an issue for the entity. This is being managed through the risk register and a response plan, with revised budget forecasts, programs and services to meet members needs in the circumstances. There is no going concern for 2020, as the entity has no funding tied to prior the year that may need to be refunded, no larges debts that may not be paid, and trade debtors are lower than the previous year at the end of the reporting period. Working with schools that are to continue in some form or other, and have government funding supporting them, is a relatively low risk.

The entity also has reserves that can help sustain them at this time, and being debt free and in possession of a large asset, there is the potential to use the asset if required to continue work for some time until the COVID-19 restrictions are lifted. Government support for small business will also help ensure he entity can continue to operate successfully during 2020.

Except for the above, no other matters or circumstances have arisen since the end of the financial year which significantly affected or could 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.

ACN 004 892 755

Directors' Report

31 January 2020

5 Meetings of directors

During the financial year, 6 meetings of directors were held. Attendances by each director during the year were as follows:

	Directors' Meetings		
	Number eligible to attend	Number attended	
Ms Clare Delaney	6	6	
Dr Ann Downton	6	6	
Ms Patricia Jelbart	4	4	
Mrs Kate Copping	6	6	
Dr Dan Cloney	6	4	
Mrs Louise Gray	2	2	
Ms Michaela Epstein	6	6	
Mr Peter Karakoussis	6	4	
Ms Allason McNamara	6	4	
Mr Thomas Moore	2	1	
Mr Michael O'Connor	6	6	
Mr Juan Ospina Leon	6	6	
Ms Kylie Slaney	6	5	
Mr James Spithill	2	2	
Dr Max Stephens	6	5	

6 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.

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.

ACN 004 892 755

Directors' Report

31 January 2020

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 2020 has been received and can be found on page 6 of the financial report.

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

Director:

Mr Michael O'Connor

Director: Juan D. Byin. Loon Mr Juan Ospina Leon



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 2020, 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

Nexia Melbourne Audit Pty Ltd Melbourne

Dated: this 17th day of April 2020

P. Welvero.

Andrew S. Wehrens Director

Nexia Melbourne Audit Pty Ltd

Registered Audit Company 291969 Level 12, 31 Queen Street Melbourne VIC 3000

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ACN 004 892 755

Statement of Profit or Loss and Other Comprehensive Income

For the Year Ended 31 January 2020

		2020	2019
	Note	\$	\$
Revenue	5	2,520,113	2,157,841
Other income	5	20,194	25,441
Employee benefits expense		(818,645)	(770,160)
Depreciation and amortisation expense		(59,066)	(54,733)
Membership expenses		(96,227)	(91,758)
Publications and journals		(295,759)	(265,805)
Annual conference		(213,983)	(209,739)
Student activities		(70,650)	(68,683)
Professional development		(264,359)	(251,224)
Other expenses	_	(571,483)	(435,241)
Profit for the year	-	150,135	35,939
Other comprehensive income for the year	_	-	
Total comprehensive income for the year	=	150,135	35,939

ACN 004 892 755

Statement of Financial Position

As At 31 January 2020

		2020	2019
	Note	\$	\$
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	7	584,389	362,672
Trade and other receivables	8	122,295	200,924
Inventories	9	45,888	42,214
Other assets	12	37,874	54,861
TOTAL CURRENT ASSETS		790,446	660,671
NON-CURRENT ASSETS	-	•	
Property, plant and equipment	10	1,690,696	1,698,323
Intangible assets	11	135,547	71,707
TOTAL NON-CURRENT ASSETS		1,826,243	1,770,030
TOTAL ASSETS	=	2,616,689	2,430,701
LIABILITIES CURRENT LIABILITIES			
Trade and other payables	13	141,640	154,763
Employee benefits	15	112,166	95,592
Other liabilities	14	298,141	267,792
TOTAL CURRENT LIABILITIES	_	551,947	518,147
Employee benefits	15	13,667	11,614
TOTAL NON-CURRENT LIABILITIES	_	13,667	11,614
TOTAL LIABILITIES	_	565,614	529,761
NET ASSETS	=	2,051,075	1,900,940
EQUITY	16	1 346 534	1 3/6 521
Retained earnings	10	704 544	554 400
TOTAL EQUITY	-	2 054 075	4 000 040
···-	_	2,051,075	1,900,940

ACN 004 892 755

Statement of Changes in Equity

For the Year Ended 31 January 2020

2020

	Capital Profits Reserve \$	Asset Revaluation Surplus \$	Total \$
Balance at 1 February, 2019	554,409	1,346,531	1,900,940
Profit for the year	150,135	-	150,135
Balance at 31 January 2020	704,544	1,346,531	2,051,075

2019

	Capital Profits Reserve \$	Asset Revaluation Surplus \$	Total \$
Balance at 1 February 2018	518,470	1,346,531	1,865,001
Profit for the year	35,939	-	35,939
Balance at 31 January 2019	554,409	1,346,531	1,900,940

ACN 004 892 755

Statement of Cash Flows

For the Year Ended 31 January 2020

		2020	2019
	Note	\$	\$
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers, members and grants		2,646,445	2,206,542
Payments to suppliers and employees		(2,319,522)	(2,193,905)
Interest received	_	2,840	3,043
Net cash provided by operating activities	20	329,763	15,680
	_		
CASH FLOWS FROM INVESTING ACTIVITIES: Purchase of property, plant and equipment		(108,046)	(111,667)
Net cash used in investing activities	_	(108,046)	(111,667)
Net increase in cash and cash equivalents held		221 717	(05 087)
Cook and each aquivalents at havinning of year		221,717	(33,307)
Cash and cash equivalents at beginning of year	-	302,072	400,009
Cash and cash equivalents at end of financial year	7	584,389	362,672

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

The financial report covers The Mathematical Association of Victoria as an individual entity. The Mathematical Association of Victoria is a not-for-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*, AASB 1048 *Interpretation of Standards* 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 Change in Accounting Policy

Revenue from Contracts with Customers - Adoption of AASB 15

The Company has adopted AASB 15 *Revenue from Contracts* with Customers and AASB 1058 *Income of Not-for-Profit Entities* for the first time in the current year with a date of initial application of 1 February 2019.

The Company has applied AASB 15 and AASB 1058 using the cumulative effect method which means the comparative information has not been restated and continues to be reported under AASB 111, AASB 118, AASB 1004 and related interpretations. Adoption of AASB 15 and AASB 1058 have had no impact on these financial statements.

3 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.

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

3 Summary of Significant Accounting Policies

(b) Revenue and other income

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

Grant revenue is recognised in the statement of profit or loss and other comprehensive income when the entity obtains control of the grant, it is probable that the economic benefits gained from the grant will flow to the entity and the amount of the grant can be measured reliably.

When grant revenue is received whereby the entity incurs an obligation to deliver economic value directly back to the contributor, this is considered a reciprocal transaction and the grant revenue is recognised in the statement of financial position as a liability until the service has been delivered to the contributor, otherwise the grant is recognised as income on receipt.

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).

(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.

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Notes to the Financial Statements

For the Year Ended 31 January 2020

3 Summary of Significant Accounting Policies

(e) Property, plant and equipment

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%
Computer Software	20-25%

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.

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) Financial instruments

Financial instruments are recognised initially using trade date accounting, i.e. on the date that the Company becomes party to the contractual provisions of the instrument.

On initial recognition, all financial instruments are measured at fair value plus transaction costs (except for instruments measured at fair value through profit or loss where transaction costs are expensed as incurred).

Financial Assets

Financial assets are divided into the following categories which are described in detail below:

loans and receivables;

Financial assets are assigned to the different categories on initial recognition, depending on the characteristics of the instrument and its purpose. A financial instrument's category is relevant to the way it is measured and whether any resulting income and expenses are recognised in profit or loss or in other comprehensive income.

All income and expenses relating to financial assets are recognised in the statement of profit or loss and other comprehensive income in the 'finance income' or 'finance costs' line item respectively.

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

3 Summary of Significant Accounting Policies

(f) Financial instruments

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise principally through the provision of goods and services to customers but also incorporate other types of contractual monetary assets.

After initial recognition these are measured at amortised cost using the effective interest method, less provision for impairment. Any change in their value is recognised in profit or loss.

The Company's trade and other receivables fall into this category of financial instruments.

Significant receivables are considered for impairment on an individual asset basis when they are past due at the reporting date or when objective evidence is received that a specific counterparty will default.

The amount of the impairment is the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired receivable.

In some circumstances, the Company renegotiates repayment terms with customers which may lead to changes in the timing of the payments, the Company does not necessarily consider the balance to be impaired, however assessment is made on a case-by-case basis.

Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities depending on the purpose for which the liability was acquired. Although the Company uses derivative financial instruments in economic hedges of currency and interest rate risk, it does not hedge account for these transactions.

The Company's financial liabilities include borrowings, trade and other payables (including finance lease liabilities), which are measured at amortised cost using the effective interest rate method.

Impairment of financial assets

At the end of the reporting period the Company assesses whether there is any objective evidence that a financial asset or group of financial assets is impaired.

Financial assets at amortised cost

If there is objective evidence that an impairment loss on financial assets carried at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the financial assets original effective interest rate.

Impairment on loans and receivables is reduced through the use of an allowance accounts, all other impairment losses on financial assets at amortised cost are taken directly to the asset.

Subsequent recoveries of amounts previously written off are credited against other expenses in profit or loss.

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

3 Summary of Significant Accounting Policies

(g) 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.

(h) 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.

(i) 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.

(j) 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.

(k) 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.

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

3 Summary of Significant Accounting Policies

(I) 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.

(m) 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.

(n) Adoption of new and revised accounting standards

The Company has adopted all standards which became effective for the first time at 31 January 2020, the adoption of these standards has not caused any material adjustments to the reported financial position, performance or cash flow of the Company.

4 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.

5 Revenue and Other Income

	2020	2019
	\$	\$
Revenue		
- membership fees	359,781	361,224
- seminars and conferences	542,494	512,917
- student activities	113,151	94,945
- publications and solutions	380,355	328,590
- professional development	589,161	558,909
- grants and sponsorships	535,171	301,256
	2,520,113	2,157,841
Other Income		
- interest	4,918	3,044
- miscellaneous	15,276	22,397
	20,194	25,441
Total Revenue and Other Income	2,540,307	2,183,282

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

6 Result for the Year

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

	2020	2019
	\$	\$
Other expenses:		
Provision for long service leave	7,998	(29,639)
Depreciation and amortisation expense		
- buildings	5,572	5,522
- plant and equipment, furniture and fittings	18,365	7,986
- software	27,897	37,998
Auditors remuneration		
- auditing the accounts	8,380	7,980
- assistance with preparation of the financial report	2,210	2,100
Impairment losses on financial assets	7,232	-
Cash and Cash Equivalents		
Cash on hand	381	265
Bank balances	584,008	362,407
	584,389	362,672

Reconciliation of cash

7

8

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	584,389	362,672
Trade and Other Receivables		
CURRENT Trade receivables	122,295	187,333
Provision for impairment	-	-
	122,295	187,333
Other receivables	-	13,591
	122,295	200,924

The carrying value of trade receivables is considered a reasonable approximation of fair value due to the short-term nature of the balances.

The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable in the financial statements.

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

9 Inventories

	2020 \$	2019 \$
CURRENT		
At cost: Publications	45,888	42,214
10 Property, plant and equipment		
LAND AND BUILDINGS		
Freehold land At directors' valuation	1,346,531	1,346,531
Buildings At cost Accumulated depreciation	482,457 (203,812)	480,770 (198,240)
Total buildings	278,645	282,530
Total land and buildings	1,625,176	1,629,061
PLANT AND EQUIPMENT		
Plant and equipment, furniture and fittings At cost Accumulated depreciation	388,670 (323,150)	374,048 (304,786)
Total plant and equipment, furniture and fittings	65,520	69,262
Total property, plant and equipment	1,690,696	1,698,323
11 Intangible Assets		
Software		
Cost Accumulated amortisation	742,516 (606,969)	650,779 (579,072)
Net carrying value	135,547	71,707

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

12	Other Assets		
		2020	2019
		\$	\$
	CURRENT		
	Prepayments	37,705	54,861
	Accrued income	169	-
		37,874	54,861
13	Trade and Other Payables		
	CURRENT		
	Unsecured liabilities		
	Trade payables	17,602	59,314
	GST payable	39,494	40,034
	Accrued expenses	49,941	34,882
	Other liabilities	34,603	20,533
		141,640	154,763
14	Other Liabilities		
	CURRENT		
	Memberships received in advance (net of subscriptions)	298,141	267,792
15	Employee Benefits		
	Current liabilities		
	Annual leave	63,173	52,543
	Long service leave	48,993	43,049
		112,166	95,592
	NON-CURRENT		
	Long service leave	13,667	11,614
		13,667	11,614
16	Reserves		
	Asset revaluation reserve		
	Opening balance	1,346,531	1,346,531

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

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

17 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 2020 the number of members was 2,045 (2019: 1,454).

18 Auditors' Remuneration

	2020	2019
	\$	\$
Remuneration of the auditor of the company, Nexia Melbourne Audit Pty Ltd, for:		
- auditing of the financial statements	8,380	7,980
- preparation of the financial report	2,210	2,100
Total	10,590	10,080

19 Contingencies

In the opinion of the Directors, the Company did not have any contingencies at 31 January 2020 (31 January 2019:None).

20 Cash Flow Information

Reconciliation of net income to net cash provided by operating activities:		
Profit/(loss) for the year	150,135	35,939
Non-cash flows in profit/(loss):		
- depreciation and amortisation	51,834	54,733
Changes in assets and liabilities:		
- (increase)/decrease in trade and other receivables	78,629	(65,666)
- (increase)/decrease in prepayments	16,987	47,637
- (increase)/decrease in inventories	(3,674)	(12,050)
- increase/(decrease) in income in advance	30,349	91,968
 increase/(decrease) in trade and other payables 	(13,123)	(85,254)
 increase/(decrease) in employee benefits 	18,626	(51,627)
Cashflow from operating activities	329,763	15,680

ACN 004 892 755

Notes to the Financial Statements

For the Year Ended 31 January 2020

21 Events after the end of the Reporting Period

The financial report was authorised for issue on 17 April 2020 by the Board of Directors.

Post the audited financial period, COVID-19 became an issue for the entity. This is being managed through the risk register and a response plan, with revised budget forecasts, programs and services to meet members needs in the circumstances. There is no going concern for 2020, as the entity has no funding tied to prior the year that may need to be refunded, no larges debts that may not be paid, and trade debtors are lower than the previous year at the end of the reporting period. Working with schools that are to continue in some form or other, and have government funding supporting them, is a relatively low risk.

The entity also has reserves that can help sustain them at this time, and being debt free and in possession of a large asset, there is the potential to use the asset if required to continue work for some time until the COVID-19 restrictions are lifted. Government support for small business will also help ensure he entity can continue to operate successfully during 2020.

Except for the above, no other matters or circumstances have arisen since the end of the financial year which significantly affected or could significantly affect the operations of the Company, the results of those operations or the state of affairs of the Company in future financial years.

22 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

ACN 004 892 755

Directors' Declaration

In the directors' opinion:

- The Company is a not reporting entity because there are no users dependent upon general purpose financial 1. 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 7 to 21, 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
 - give a true and fair view of the financial position as at 31 January 2020 and of the performance for the year ended (b) on that date.
- There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due 3. and payable.

Signed in accordance with a resolution of the Directors.

Director

Director ... Juan D. Ugun. Loom Mr Juan Ospina Leon

Mr Michael O'Connor



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 2020, 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 2020 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.

Nexia Melbourne Audit Pty Ltd

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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.



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 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.

Nexia

Nexia Melbourne Audit Pty Ltd Melbourne

P.Welrecoro.

Andrew S. Wehrens Director

Melbourne

Dated this 17th day of April 2020





Disclaimer of Opinion on Detailed income and expenditure statement for the year ended 31 January 2020

The additional financial data presented on page 27 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 2020.

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.

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Nexia Melbourne Audit Pty Ltd Melbourne

P. Welners.

Andrew S. Wehrens Director

Dated this 17th day of April 2020

Nexia Melbourne Audit Pty Ltd

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ACN 004 892 755 For the Year Ended 31 January 2020

Detailed Income Statement

	2020	2019
	\$	\$
Income		
Membership fees	359,781	361,224
Conference - December	542,494	512,917
Student activities	113,151	94,945
Publications and solutions	380,355	328,590
Services revenue	589,161	558,909
Grants and sponsorships	535,171	301,256
Interest received	4,918	3,043
Miscellaneous income	15,276	22,397
Total income	2,540,307	2,183,281
Less: Expenses		
Advertising and promotion	98,279	73,939
Affiliation fees	48,100	45,987
Auditors remuneration	10,590	9,735
Impairments	7,232	-
Bank Charges	5,299	5,454
Catering expenses	122,075	124,872
Cleaning	13,099	8,479
Consultants and presenters	344,905	459,194
Depreciation and amortisation	51,834	54,733
Equipment rental	24,537	89,600
Facilities - external	69,442	27,294
Heat, light and power	4,026	4,907
Courier service	3,521	3,142
Insurance	16,857	13,643
Legal fees	10,181	5,081
	7,998	(29,639)
Office expenses	43,862	46,991
Postage and reight	29,354	23,497
Publications, printing and stationery	205,285	192,898
Rates and taxes	5,139	4,550
Repairs and maintenance	3,500	9,241
Moree	50,251	70,100
Staff training	8 515	14 057
Staff and members amenities	1 902	2 975
Subscriptions	27 026	2,575
Superannuation contributions	67 137	64 388
Telenhone and fax	10 796	8 535
Travelling and accommodation	80 548	64 098
Workcover	3.901	2,247
Training program	226,103	_,,
Total Expenses	2,390,172	2,147,342
Profit from ordinary activities	150.135	35.939

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