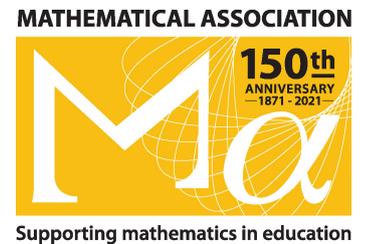




ANNUAL REPORT 2020–2021



PRESIDENT'S REPORT

As my term as president of the mathematical association drew to a close, the small matter of a presidential address began to loom large over my calendar. I thought about giving a talk of some of the nicest mathematical problems I've been toying with recently, but soon realised that – as exciting as linear algebra is – I'd struggle to keep people's attention with a full hour of the stuff. I thought about going over some of the incredible invisible mathematics that has helped protect so many people's lives over the past year, but then reconsidered – with the end of the pandemic finally in sight, I'm not sure this was the time to relieve the bad old days (however nice the maths might be). And so eventually I landed on the topic that is closest to my heart. It's the subject I know best – the one that I hope has the most relevance to the classroom. I decided to speak on the things I've learned in my time communicating mathematics to the public.

It's no secret that our subject has a bit of an image problem. I'm sure we've all had first hand experience of the pervasive view across the country that mathematics is a subject which belongs in dusty textbooks, one which has little relevance to the average person once they've left school behind. Of course, I don't need to persuade you of the truth: that mathematics is a playground for the mind – a place bursting with creativity and ingenuity. But at the start of my career as a populariser of mathematics, I thought long and hard about this gap – about why the general perception of the subject is so at odds with the reality.

It strikes me that mathematics is alone in this regard. Physicists, economists – even historians – don't seem to struggle with this problem. As Edward Frenkel points out, the Higgs Boson, general relativity and quantum theory are regularly trotted out by the media and lapped up by the public giving a strong sense of the role of the subject in our modern world, but there are no equivalently high-level mathematical concepts in the public consciousness. Perhaps, in part, it is because for mathematics to be useful in today's society it has to be invisible.



As Ian Stewart says, If you had to have a PhD in mathematics to be able to use a mobile phone or a computer, they never would have become commercially successful.

But I wonder too if the gap appears, at least in part, because of the way that some mathematicians closely guard their subject. As an undergraduate, I had a mathematics professor who was known for saying: "The world fears Mathematicians, let's keep it that way." It would be unfair to take this statement too seriously, but I have certainly noticed a pride among some in the way the subject is perceived by the outside. Maybe this is why the physicists have overtaken us. Maybe they are more motivated to find and communicate the examples that make their subject come alive to the uninitiated. Or perhaps, less charitably, there is something to be gained by people on the inside perpetuating the myth that there is something special or unique about them, and it is this specialness that means they are capable of mathematics when so many others fail.

And yet, anyone who has taught mathematics knows that this just isn't the case. Of course there's room for

natural talent, but in the vast majority of cases, it is perseverance and commitment that matter much more to success than raw ability.

I've noticed that adults tend to either really love mathematics or despise it. It's strange. You never meet anybody who is ambivalent. So, I've come to the conclusion that our relationship with mathematics is a sort of unstable equilibrium. Maybe we all start off on a neutral footing, but one tiny kick in a particular direction is enough to spin off – perhaps someone suggests that maths might not be for you, and you pay less attention that week, start struggling, fall behind, and start to believe that you can't do it. Or maybe the kick can be positive. A teacher takes the time to encourage you, you do well on that week's content. You listen a little harder the next week. You start to adopt the idea of being good at the subject as part of your character. And before you know it, you're in your 30s, a professional mathematician having just finished a year serving as president of the Mathematical Association.

Okay, I'm joking about that last bit. But I think my main point still stands. As teachers, popularisers, communicators, and practitioners of this rich, glorious subject, it is our job to create as many positive kicks as we possibly can. Part of that is about listening to the mathematical curiosity that people already have and seeing how we can add to it: How quickly a virus is spreading, which way you should dive when you're taking a penalty in football, the best tactics to use for dating. But I also think it's about encouraging people to see themselves as potential mathematicians as much as possible.

I'm reminded of the great unwritten law of improv: "If we treat each other as if we are geniuses, poets, and artists, we have a better chance of becoming that". For way too long, only one group of people has been lucky enough to have society believe they were capable of being mathematicians. I don't know about you, but I want to do as much as I can to change that.

It's only by acting as though everyone is part of mathematics – by being generous with our subject, by being motivated to find the good examples, by listening and expanding on existing curiosity – that I think we'll ever succeed in closing that gap, and persuading people that mathematics really is a subject for everyone.

Hannah Fry
(President 2019–2020)

AGM REPORT

May I add my welcome to all members to the AGM, held on-line and at the conference to celebrate the 150th anniversary of The Mathematical Association. This is our first on-line annual conference. To a degree forced upon us by the situation created by the pandemic but nevertheless it has presented us with considerable opportunities. Whilst many would prefer to meet to face-to-face, there are also many who cannot afford the time or money to attend our conference and on-line offers them the chance to participate and be a part of the MA making our celebration all the wider. The attendance was capped at 1000 and this cap has been met. All the proceedings will be available on-line after the conference and, such has been the demand for places, we are now taking bookings from colleagues who have been unable to attend the live events to have access to the post conference offerings. Your organising committee is already thinking about next year and how we might be able to combine the face-to-face and on-line in a way that will benefit all members of the MA and the mathematics education community. The dates of next year's conference will be the 12th–14th of April so put the date in your diary now.

This is our 150th year, a remarkable of achievement of which we should be proud. The foundation of the MA is taken to be the conference of January 17th 1871, under the heading, Association for the reform of geometrical teaching, which almost immediately became the Association for the Improvement of Geometrical Teaching (AIGT) out of which grew The Mathematical Association. We owe our founders a debt of gratitude, they were interested not only in the pedagogy of mathematics but the mathematics itself and these twin concerns have continued to sustain and give direction to the Association throughout its 150 years. At this point it would be right and proper to acknowledge in some way our foundation, perhaps by a round of applause, but I am sure that each of us can celebrate in our own way the 150th anniversary of The Mathematical Association.

News from HQ

Following the retirement of Marcia Murray as chief administrator we appointed Sandi Atkinson to the role of Executive Officer, a new title with more responsibility for the running and organisation of HQ and the MA. This has proved to be an excellent appointment.

Amongst HQ's achievements have been. all staff have successfully moved to working from home during the pandemic; a member of staff has visited HQ at least once per week to attend to post and book orders so that service to members and other customers has been maintained; the First Mathematics Challenge was successfully moved on line; the Primary Mathematics Challenge was offered as either on-line or paper based; the most successful conference in terms of attendance, this conference, has been organised.

Two members of staff at HQ have left us during the year, Charnjit Seehra and Carol Mackerness. We wish them both well in their respective futures. Just before the Easter holidays we were able to recruit a new Membership and Administration Assistant, Pragna Gandesha, starting on May 4th . We welcome her to the team and look forward to working with her.

COVID and the MA's finances

As with many other charitable organisations, COVID has hit our finances. David Miles, our treasurer, will give full details under the next agenda item. Briefly, COVID has exacerbated our financial situation and during the course of 2020 we have taken steps to address this. However, many of the measures we have implemented will take some time to come to fruition. David Miles, our Treasurer, will deal with this in much greater detail in the next agenda item.

Amalgamation/Merger

Talks about the amalgamation of the five classroom facing organisations continue. The organisations involved are the ATM, AMET, NANAMIC, NAMA and ourselves. Uniquely amongst school curriculum subject associations, mathematics is the only one to have five separate associations. The majority of such associations have one, some two. Amalgamation into one subject association offers several advantages. Among them are; one single voice speaking to government about mathematics and classroom practice, a single place for teachers to come for ideas, advice and resources for teaching mathematics, economies of scale in terms of delivery of services for teachers of mathematics, and not least a single annual conference to attend.

So what are the steps along the way and where are we in taking those steps. I will begin at the end and work backwards. In order to merge with the other

four associations we would need to vote to dissolve the MA in favour of joining the new association. This would require a vote at a future AGM or EGM. However our regulations require a two thirds majority of those present and voting for dissolution of the Association. Which given that a quorum of 35 members is required at General meetings means as few as 12 members could determine the fate of the Association. Council therefore agreed to refer these matters to our solicitors. We have been advised that our articles need up-dating in several respects to bring them into line with current charity legislation and to enable voting by the whole membership through a proxy system. The new articles will be addressed at either our next AGM or an EGM. If the new articles are accepted at such a meeting then the whole membership will be enfranchised to vote on dissolution and merger with the other associations should such a proposal be brought forward at an AGM or EGM.

Before we get to this stage, there does need to be an established charity to dissolve in favour of. The group discussing merger had thought to set up a shadow charity with representatives from each association acting as shadow trustees. Council however declined to make such nominations at its last meeting but took the position that if the merger was to move ahead successfully we needed legal advice to get it right. Our representatives on the group discussing merger will take this position back to the group.

The view on decisions such as where will the new organisation be located, who will be employed to do what, what publications will there be etc. appear to be hardening around making such decisions after the merger takes place.

I will keep members up to date with progress in the matters above via our print MA News and e-news. I am happy to receive e-mails from colleagues on this subject and will reply as fully as I am able.

Thanks

In closing my report I would like to thank everybody who has served on Council this year. It has not been an easy year with difficult decisions to be made. The coming year will, I suspect, be no different but the new Council will, I am, sure carry the Association forward successfully through its 150th year.

In particular I would like to thank Dr. Ems Lord of NRich. The MA extracts three years' service from its Presidents,

President Designate, President and Immediate Past President. Ems has served the MA to the full in all three roles. She has made telling contributions to discussions in Council and Standing Committee, been a major contributor to the conference committee and enabled us to have an NRich session at our conference this year – an excellent session, available on line after the conference is over should you have missed it. We were deprived of her Presidential Address as a live event but it was made available to members on the website and published, as traditional, in the Mathematical Gazette. And a very good one it was too, well worth reading and thinking about.

Finally, thinking back to the plenary from Steve Wren the new HMI at Ofsted for Mathematics, it is clear that teachers of mathematics at all stages of education have had a very hard and difficult year. They deserve the MA's gratitude for all that they have done for their students and our support in taking forward mathematics education in all classrooms through the coming year and on into the future.

Finally, finally, save the date, 12th–14th April 2022, our next annual conference!

I am happy to take questions or, if preferred, e-mails on any of the above.

BRANCHES COMMITTEE

The Branches Committee met as usual in late October 2020. This was a Zoom meeting. Reports were received from committee officers and appointments to officer roles for the year April 2021 to April 2022 were discussed. Following on from this the new Standing Committee comprises Cindy Hamill (Chair), Elizabeth Glaister (Secretary), David Pountney (Treasurer), Keith Cadman (Vice-Chair) and David Myers (Youth Activities Officer). It was once again suggested that branches should be encouraged to provide an introductory paragraph for their page on the MA website. It was also suggested that branches should try to send copy about their activities to the Editor of MA News. The Chair subsequently wrote to branches about both of these matters. In this meeting branch representatives gave accounts of their recent events and outlined their upcoming events. Cindy Hamill, of Yorkshire Branch,

was confirmed as the new Chair of Branches at the AGM in early April. The short committee meeting in April was chaired by Cindy and featured reports from the new officers. It was pointed out that Chris Pritchard, new MA president, has offered to give talks to branches. It was suggested that in future some branches might consider, subject to government restrictions, having a mixed economy of face to face events and online events. The date of the next committee meeting was agreed as Saturday 30 October 2021.

There continues to be a tremendous amount of work done by branch organisers. They do this work on a voluntary basis and devote much of their time to ensuring that events happen and run smoothly. It would be a great pity if their work was not given as much publicity as possible. So we have once again placed great importance on the regular updating of the Branches sections of the MA website, E-newsletter and MA News throughout the year. The MA website continues to serve as the unique reference point for details of all branch events. New events are now uploaded very quickly. Upcoming branch events are advertised in the E-newsletter which is emailed to members at the end of each month. All three editions of MA News during the year have also contained branch news.

It was always going to be difficult to predict how individual branches would go forward in this unprecedented year. The Chair informed them early on that the MA Zoom account was available to use for online events at suitable times. We were delighted that during the year a new MA branch was formed in Stoke-on-Trent. Hence there are now 13 local branches. These are Birmingham, Cambridge, East Midlands, Exeter, Gloucestershire, Liverpool, London, Manchester, Meridian (based in Reading), Sheffield, Stoke-on Trent, Sussex and Yorkshire. This is an increase from 12 this time last year and from 11 in 2019. Unfortunately Gloucestershire has continued to be inactive during this year. However a small group is now planning to take it forward. Eight of these 13 branches are run jointly with the ATM. These locations give a good geographical spread across England. In these difficult times it is a credit to local organisers that a total of 19 online branch events took place during the year from the end of April 2020 to the end of April 2021.

In summary the main focus during this difficult year has been on giving as much support as possible to branches. Updating of all branch news on the MA website etc has once again been really important in

terms of giving as much additional publicity as possible to branches and their events.

Keith Cadman

*Chair of Branches until April 9
29 April 2021*

ANNUAL CONFERENCE 2021

The 2021 Annual Conference was a virtual one because of the restrictions in place due to the Covid-19 pandemic. The conference was also part of the MA's 150th Anniversary celebrations. Conference bookings were capped at 1,000 and this total was reached a few days before conference. Almost 200 further bookings for access to the recordings followed.

The theme of the conference was *Building Mathematicians for the Future* and was held on 1st, 9th and 10th April 2021. *Dr Nira Chamberlain, President of The Institute of Mathematics and its Applications opened the conference. His talk, **The Black Heroes of Mathematics**, was inspiring. He shared his own story and those of other inspirational men and women who overcame obstacles to prove that mathematics is truly for everybody. The chat box exploded with teachers keen to share these life stories with their students.*

The two further plenaries on Day 1 were *Claire Metcalfe and Liz Woodham of the NRICH Team – **Creating a Low Threshold High Ceiling Classroom** and Steve Wren HMI, **The impact of the pandemic upon mathematics education in English schools**. Claire and Liz took us through the NRICH task *Dozens*, giving us the opportunity to work on the task ourselves and consider how we could use it in the classroom. Steve Wren's open and honest presentation shared how some schools had coped with the pandemic, and its impact in mathematics. Steve did not pretend there were answers when there were none and the chat box showed that his audience appreciated this.*

*The second day saw Dr Hannah Fry's engaging **Presidential Address, Communicating what counts – lessons I've learned in how to bring maths to the masses**. Hannah's 8 tips (numbered 0 to 7, of course) included reminders to start and end big, include a hook such as a key and a puzzle so that your audience have a reason to care about what you are saying and much more. Also on this middle day were the AGM, Sponsors Expos, Mathematical art exhibition, General Network*

*room, Fun Quiz hosted by Martin Harris and Andrew Jeffrey's **Mathematical Mysteries – truly something for everyone**.*

*Dr Colin Foster, Reader in Mathematics Education in the Mathematics Education Centre at Loughborough University opened the third and final day with his plenary '**Can we teach 'understanding'?** Colin questioned what we mean by understanding and whether we can teach understanding, or do we have to wait for it to emerge? He began by inviting us to answer the question, 'What kind of maths teacher are you?' This led to some unpacking of what we mean by conceptual understanding and how hard it is to define and assess, particularly when compared to procedural understanding. With a focus on Pythagoras' theorem, Colin explored whether demonstration and proof led to understanding, noting that neither answered why these demonstrations and proofs work. Colin gave us many interesting questions to consider along the way, for example, 'Are tasks tests of understanding or do they generate understanding?' This was a very interesting and thought-provoking plenary.*

Each plenary attracted between 250 and 450 delegates and all generated unfailingly positive comments. There were 60 sessions available over the course of the conference, offered in six strands. Five of these were themed according to the phase or phases the talk was most suited to, with a sixth general strand. All sessions were well attended, ranging from an average of 40–60 up to over 200 delegates.

So, our first virtual conference was a great success. Special thanks must go to Alice at HQ and David Miles for their superb work publicising the conference, both before and during the conference, on social media. Event Works Europe did a fantastic job preparing speakers and presenters for the event and hosting it over the three days. The main host, Neil, ensured there was a great atmosphere throughout, despite the event being online.

We will be working with Event Works Europe to bring you further events. Meanwhile, mark next year's conference in your diary: 12th – 14th April 2022, format and details to be decided.

Cherri Moseley
Chair of Conferences

PUBLICATIONS COMMITTEE

The Publications Committee has had a very busy and exciting year. The new publications in the past year include:

A Level Revision Cards	David Miles
Pack up a Penguin	Chris Pritchard
Geometry Juniors	Ed Southall
Hooked on Mathematics	Jenni Back
A Level Mathematics	David Miles
GCSE Foundation Revision Cards grade 5–1 – revised	Ray Huntley and Mary Ledwick

The list represents a tremendous amount of work not only by the authors but the proof readers, members of the Committee and HQ staff. The Mathematical Association is extremely grateful to all those who have written and in any way worked upon these publications. They are of excellent quality and are selling well so they clearly have addressed the needs of the profession.

The Committee welcomed two new members, Becky Ellery and Joy Sheekey. We very much hope that they will help and advise us in addressing the gap in our publications aimed at the primary age range. Ray Huntley, the Chair of the Committee, resigned due to personal reasons during the course of the year. The MA was very sorry to see Ray leave the Committee but he continues to serve the MA as the lead editor of the MA's journal, *Primary Mathematics*. Chris Pritchard and Tom Roper between them chaired subsequent meetings but the Committee begins the new year with a new chair. The MA is very pleased and proud to welcome Jill Trinder to the Chair of Publications Committee.

The Committee has continued to move forward. Jenni Back's book, *Hooked on Mathematics*, was launched via a webinar, the first such launch. It proved to be very successful and hopefully will lead the way to other such book launches and the development of CPD via webinars by the MA. The Committee is also looking at how books such as Ed Southall's *Geometry Juniors* can be made available electronically for use in the modern mathematics classroom via whiteboards. Future publications being assessed are a volume of invited essays on the theme of "if I could tell you one thing..." to be edited by Ed Southall; two volumes based around articles from *Mathematics in Schools*, one on problem solving and investigations, one on

learning mathematics, to be edited by John Berry and Chris Pritchard; a set of primary problem solving cards based on the questions set over the years in the Primary Mathematics Challenge. The Committee, and Jill, its new chair, have a busy year ahead.

EDITORIAL BOARD

This is my fourth report since taking over at the 2017 AGM. It has been a challenging year but the journals have kept to schedule. For the *Gazette* and *Maths in School*, there have been no changes to editors, so Gerry Leverhisa, John Berry and Chris Pritchard are still in control.

However a long-standing production team member, Tina Webb, has retired. She has been a mainstay of *Maths in School* more or less since it was established in 1971 and in recent years has given valuable assistance to *Primary Mathematics*. We must thank her and wish her all the best. As soon as practicable, a tangible token of appreciation will be given to Tina. After a considerable number of years Cherri Moseley has stepped down as an editor for *Primary Mathematics* which just leaves Ems Lord and Ray Huntley as editors. The team of *Equals Online* is still led by Alan Edmiston. Peter Ransom is still in control of *SYMMetryPlus* and Wil Ransome manages *Mathematical Pie*, helped by Erick Gooding. Last in this list is *MA News* with Dave Pountney still in charge as editor. Each of the journals have others involved but these are the same as I reported in 2020. It is very pleasing to be able to report that all editions were produced on schedule but disappointing that the *Gazette* suffered from some delays in its distribution.

In addition to the work of those already mentioned, Janet Powell has stepped down as the MA Advertising Manager. This work is now being handled by Media Shed.

So, as usual, I will close with heartfelt thanks to all the editors and their teams for all the hardwork done in the past year (and for all they will do in the months ahead). Should you have any comments or questions about our journals do please e-mail me on editor-in-chief@ma.org.uk or write to me care of MA headquarters.

CHALLENGES

The First Mathematics Challenge took place during a three-week period – 22nd June–10 July 2020. The lockdown had a massive impact on the activity at the MA, but HQ were confident that we could run an online version of the FMC for the first time. We sourced some online software that was up to the job, and we moved our schools online. The majority were happy with the arrangement and once it was publicised, orders continued to increase.

219 schools took part, entering 4602 children. The response was overwhelmingly positive, with 287 children getting full marks and all 4602 children getting a certificate.

As FMC continues to grow, we look forward to welcoming schools in 2021.

The Primary Mathematics Challenge launched an online option in 2020 to account for schools and pupils still struggling with the lockdown.

We had 13820 pupils take part online and 31,190 took part on paper. This year we decided to offer a set number of papers (40k) this helped us with ordering/delivery and packing in line with government guidelines and restrictions. A temporary member of staff was employed to pack the orders.

The introduction of the online paper was successful, and the PMC team continue to look towards a more permanent platform to host the PMC paper on. We also introduced a Welsh translation of the PMC paper in 2020. We will continue to offer this option to those who want it in future years.

In February we hoped the Bonus Round could take place as it normally would. It became increasingly difficult to ensure that all schools could take part without facing issues around schools' closures and home schooling or lack of technology to allow pupils to take the Challenge at home. In the end we decided that we would make the paper available to schools on the PMC website as a PDF that they could download and complete as and when they were able to. In order that the pupils who would have ordinarily been entered into the Bonus Round, still felt they were a part of something special, we sent them all a badge based on their score in the November paper.

We extend our thanks to the hard work of all our volunteers involved in both the FMC and the PMC

papers. They work incredibly hard and without them the papers would not exist.

MA LIBRARY

Wittgenstein Archive of Francis Skinner:

At last, the book ***Ludwig Wittgenstein: Dictating Philosophy to Francis Skinner – The Wittgenstein-Skinner Manuscripts*** has been published by Springer. The MA's ownership of these manuscripts has been rewarded with three complimentary copies: one for the MA Library, one for the MA Librarian, and one for Peter Ransom, who managed the permissions as Chair of Council at the time. These papers, in the University of Leicester Library, first came to light in 2000 and their significance was then first recognised during an evaluation of the MA library as a whole. This impressive publication is undoubtedly a feather in the cap for the MA.

Book Cataloguing and Conservation:

Throughout the pandemic, book transfers and cataloguing have been discontinued. However, conservation work has continued, using a budget of £500. Eight books, including five from the John Hersee Room collection, are being repaired by Charles Nosworthy.

Research Links and Advertising:

The digitisation project by Wiley and Jisc, including historical MA material, has been delayed by the pandemic, but contract negotiations (managed by Tom Roper as Chair of Council) are close to completion.

Publicity for the MA library on Twitter (managed by Alice Hall) has continued through tweets for Florence Nightingale (born 12 May 1820), Isaac Todhunter (born 23 November 1820) and Augustus De Morgan (died 18 March 1871). Throughout the pandemic, library visiting has not been possible, and the annual Library Committee meeting for 2020 was cancelled.

Donations:

It has been an exceptional year for book donations to the MA. In 2020, the extraordinary library of Dr AEL

Davis was donated to the MA through the management of her son Richard. Her library is particularly strong on the histories of mathematics, astronomy and science, and biography. Of nearly 700 titles, just over 60% are new titles for the MA. Sadly, Dr Davis passed away in November 2020, a month after talking at length with the MA Librarian on the telephone from Australia.

In January 2021, Graham Hoare, a long-standing MA contributor, passed away and his impressive collection of mathematics books was donated to the MA through the management of his son Matthew. Of nearly 400 titles, nearly 40% are new titles for the MA, with particular strengths in logic, philosophy and the foundations of mathematics. Spine photography by Matthew was used to capture all the books involved. All these donated books are currently stored at MA HQ, waiting for transfer to the MA Library or other homes. With assistance from the MA Archivist, Mary Walmsley, all the duplicate titles will in due course be placed on offer, initially online, in exchange for donations to the MA Library fund, particularly to fund the major new cataloguing burden. All the work on sorting and listing around 1100 books has been undertaken at home during the pandemic by the MA Librarian and the MA Archivist.

Finally, a modest collection of around 80 titles has been offered to the MA by Phil Traviss, son of MA member Dennis Traviss. Spine photography was again used to capture the books, only 10% of which are new titles for the MA, and only these have been delivered to MA HQ.

Mike Price
*MA Librarian and Chair of the
Library Committee*

We began 2020 by highlighting to members and non-members alike, the benefits of being an MA member with the #MABenefits campaign.

This campaign offered new members joining us from September, free membership to the end of the year, effectively giving 16 months for the price of 12. We saw our membership grow by over 350 new members in 2020.

To ensure members were getting all the benefits and support they needed from the MA, we made all the journals available to read online, including an extensive back catalogue of both Mathematics in School and The Mathematical Gazette. We worked on the members only portal, making it more accessible and easier to navigate.

SYMmetryPlus editor Peter Ransom created SYMinimetryPlus, a mini version of SYMmetryPlus that was available freely on the MA website as a tool for parents and teachers to use with children at home during lockdown.

To help us find out more about what members value about their membership and what more we can offer towards member benefits, we implemented the first annual member satisfaction survey. Results of the survey showed that members would like to access more benefits online, we have listened, and we are working on building up our online resources in the members only area of the website.

2021 welcomed a new Chair of Membership, Jemma Sherwood. Jemma gave a fantastic session for the 2021 Annual Conference entitled *Proportional Reasoning: A Unifying Thread* – check it out in the members area if you have not already seen it.

ASSOCIATION ARTICLES AND REGULATIONS

These documents can be viewed at:

<https://www.m-a.org.uk/articles-and-regulations>

The Council from April 2020 to April 2021

Presidents

President	Hannah Fry
Immediate Past President	Ems Lord
President Designate	Chris Pritchard

Officers

Chair of Council	Tom Roper
Secretary	Paul Harris
Treasurer	David Miles

Branches	Keith Cadman
Conferences	Cherri Moseley
Editor-in-Chief	Bill Richardson
Professional Development	Sue Southward
Publications	Ray Huntley
Membership	N/A
Teaching Committee	Jim Simons
Publicity and Media	Jo Morgan

Members-without-Office

Elizabeth Glaister
Chris Pritchard
Gerry Leversha
Cordelia Myers
Bobby Seagull
Ed Southall
Owen Toller

The Company Secretary Bill Richardson

HEADQUARTERS

The Headquarters Team during 2020–2021

Executive Officer

Sandi Atkinson

Finance Officer

Linda Medhurst

Membership Officer

Charnjit Sehra

Sales, Marketing, Challenges

Alice Hall

Committees, Conferences, Publications

Carol Mackerness

THE MATHEMATICAL ASSOCIATION

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR TO 31 DECEMBER 2020

		2020			2019		
	Note	Unrestricted funds £	Restricted funds £	Total £	Unrestricted funds £	Restricted funds £	Total £
Income:							
Donations and legacies	2	11,630	-	11,630	47,018	-	47,018
Charitable activities	3	243,688	-	243,688	305,574	-	305,574
Investments	4	2,456	-	2,456	531	-	531
Other	5	6,063	-	6,063	5,517	-	5,517
Total income and endowments		263,837	-	263,837	358,640	-	358,640
Expenditure on:							
Association activities	6	315,738	-	315,738	346,495	-	346,495
Administration	7	48,066	-	48,066	69,101	-	69,101
		363,804	-	363,804	415,596	-	415,596
Net income/ (expenditure)		(99,967)	-	(99,967)	(56,956)	-	(56,956)
Gains in the year		-	-	-	71,435	-	71,435
Net movement in funds		(99,967)	-	(99,967)	14,479	-	14,479
Reconciliation of funds:							
Total funds brought forward	18	588,608	6,500	595,108	574,129	6,500	580,629
Total funds carried forward	18	488,641	6,500	495,141	588,608	6,500	595,108

All income and expenditure derive from continuing activities.