

TERM 2, 2026

# MANSW Newsletter

## MESSAGE FROM THE PRESIDENT

Welcome to Term 2!

We hope that you have all had a restful break and are back in the swing of things for what will inevitably be another busy term. This term is packed with professional learning opportunities at MANSW, see the website for details. In regard to conferences, our *K-8 conference Ignite Passion, Inspire Learning* is fast approaching on **Saturday 13<sup>th</sup> June** at Bankstown Sports Club, register [here](#).



For me at university, many of my students are starting to go out on placement to put into practice what they have been learning and to learn from their supervising teachers. I am always encouraged by how keen they all are to work with the children as they start their journey into our profession. We often spend time with them talking about their own relationship with mathematics as a subject and their level of self-efficacy about their own mathematics learning – a reflection that is worthwhile for practicing teachers too.



## Newsletter Highlights

Message from the  
President

Rethinking the 'drop'  
from Mathematics  
Advanced

Building Leadership

Indigenous  
Pedagogies

 [mathsnsw](#)

 [MANSW](#)

 [MathsNSW](#)

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Mike Askew and colleagues' research on Effective Teachers of Numeracy revealed that teachers with well-defined sets of beliefs are the most effective – including their beliefs around valuing the work of students and assisting them in discovering the connections within mathematics. And while they acknowledge there is no 'ideal type' of orientation, beliefs around an emphasis on establishing connections within mathematics more so than a view of mathematics as a collection of separate routines and procedures are more likely to have classes that make greater gains.

Making connections between concepts clear to students is an important aspect in the teaching of mathematics. In-service teachers who are teaching our young students day-to-day are often best placed to share how they make these connections in their differing contexts to different students. So, if you happen to have a prac student this semester, I encourage you to share how you plan for making these connections clear.

If you are interested in further research or in hearing more about what is currently being researched in mathematics education, we are fortunate that this year the **Mathematics Education Research Group of Australasia (MERGA) annual research conference** is in NSW and being hosted at Western Sydney University, Parramatta on 6<sup>th</sup>-10<sup>th</sup> July. I encourage teachers to attend, either for the full week (it is occurring during the July school holidays) or attend for the **Teacher's Day, Thursday 9<sup>th</sup> July**.

#### Conference sponsorship to attend for free!

As a member you may have also seen the recent email letting you that to support teacher participation, the School of Education at **Western Sydney University** is offering full conference registration sponsorships (valued at \$900 each) for 10 primary or secondary mathematics teachers from Western Sydney schools.

Sponsored Full Registration (10 places available)

Teachers interested in being considered for this sponsorship are invited to submit an Expression of Interest (EOI) of up to 200 words, outlining:

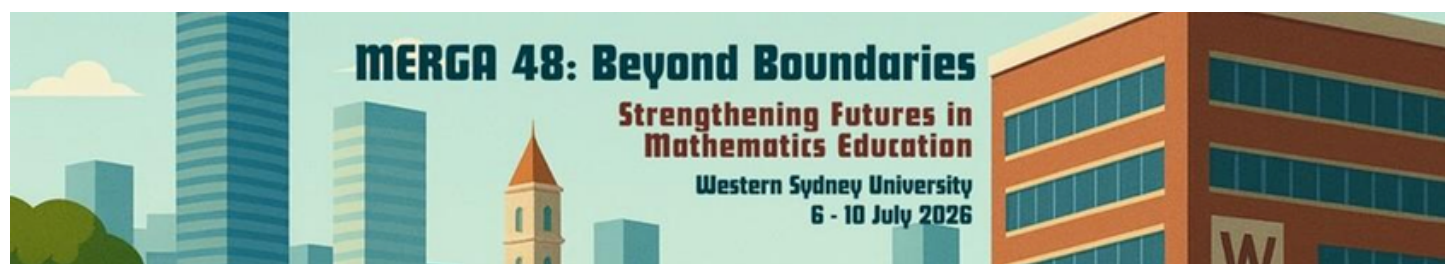
- Why they would like to attend the MERGA conference
- How they plan to share their learning with colleagues at their school and/or beyond

EOIs must clearly state the school the teacher is from. Expressions of Interest should be emailed to: [c.attard@westernsydney.edu.au](mailto:c.attard@westernsydney.edu.au)

**EOI closing date: 15 May 2026**

I hope to see you at the conference, have a great Term!

Katherin Cartwright





# RETHINKING THE "DROP" FROM MATHEMATICS ADVANCED

A recent conversation about students “dropping” Mathematics Advanced got me thinking about my experiences trying to guide students, and their parents, through the HSC. The idea of students “dropping” Advanced is often framed as a concern — and at times, even a failure of the system, but the reality is more complex.

While the numbers of students moving mathematics course can seem alarming, what we are seeing is not simply a decline in capability or ambition. It is the result of a range of pressures acting on students, parents, and schools. The public spotlight on HSC results, the emphasis on achieving Band 6 outcomes, and the ever-present desire to maximise ATAR all contribute to decision-making. Students are increasingly strategic — and understandably so.

Mathematics Advanced is a demanding course. It requires sustained effort, time, and cognitive energy — often more than other subjects — with what can appear to be limited ATAR advantage. Without university prerequisites or incentives, the reason to persist becomes even less obvious.

This creates a disconnect.

From the university perspective, lecturers complain that students are underprepared for the mathematical demands of tertiary study. Yet, universities have removed prerequisites that would signal the importance of Mathematics Advanced (or Extension 1 and 2) for STEM pathways. If we want students to value mathematics, the system around them needs to send a consistent message.

From a school perspective, students changing courses has very real consequences. Students may begin Year 11 Mathematics Advanced with a “give it a go” mindset, already anticipating that they may move courses later. However, we know that most students do better when they finish the HSC in the same course that they started. When they change from Advanced to Standard, they can miss foundational content, view the Standard course as “easy”, and ultimately not achieve as strongly as they could have. Schools then carry the additional complexity of restructuring classes and staffing mid-course which can impact even the students who remain in Advanced.



# RETHINKING THE "DROP" FROM MATHEMATICS ADVANCED

So what can we do?

Firstly, the language we use to describe student pathways matters. For years, moving from Mathematics Advanced to Standard has been labelled a "drop," framing the decision as a failure or a decline in ambition. These shifts are often highly strategic responses to a high-pressure system.

Secondly, clear communication is critical. Students and parents need to understand not only the demands of Mathematics Advanced, but also its longer-term value. Clear communication is needed to distinguish "playing the ATAR game" from "playing the life game". While Advanced may not always maximise short-term ATAR outcomes, it provides the mathematical foundation needed for success in university courses that require first year mathematics courses.

Finally, we know that the work starts earlier than Stage 6. Building strong conceptual understanding in Stage 4 and 5, and structuring Year 10 pathways to reflect the pace, workload, and complexity of Advanced, can better prepare students to make informed decisions. When students feel confident and capable, they are far more likely to commit — and persist.

This is not a simple issue, and there is no single solution.

But it is an opportunity for reflection:

What messages are students hearing — from us, from parents, and from the broader system about our courses?

How can we better support students to choose the pathway that truly serves their future?



Leadership in mathematics can often feel like an isolating endeavour. School leaders today are constantly balancing significant curriculum reform, staff development, and faculty culture. In a profession where time is a rare commodity, having a dedicated space to think and collaborate is a necessity.

This is why the MANSW Leadership suite continues to grow in both reach and impact.

The MANSW Leaders Network is designed specifically for current and aspiring leaders. Our network provides a space to connect, collaborate, and think deeply about our practice. These days are not about sitting and listening. They are about engaging with real challenges, sharing experiences, and working alongside others who understand the context.

What has made this network particularly powerful is the sense of professional trust that develops.

Leaders are not just exchanging resources but are focusing on:

- Practical Problem-Solving: Engaging with real challenges and sharing strategies that work in the current context.
- Building Professional Trust: Developing a community where leaders can test ideas and define what effective leadership looks like today.
- Providing Relevant Support: Whether refining assessment practices or navigating syllabus implementation, the focus is on immediate applicability.

Our next meeting is on 15 May. If you are leading a faculty or stepping into a new role, we invite you to join this growing community.

[Find out more or register](#)

The book cover features a large red '11' at the top. Below it, the text 'MASTERING HSC MATHEMATICS' is written in white, followed by 'YEAR 11 MATHEMATICS ADVANCED' in red. At the bottom, it says 'NEW STAGE 6 HSC SYLLABUS FOR STUDENTS AND TEACHERS' in white.

11

MASTERING  
HSC MATHEMATICS

YEAR 11 MATHEMATICS ADVANCED

NEW STAGE 6 HSC SYLLABUS  
FOR STUDENTS AND TEACHERS

The book cover features a large green '11' at the top. Below it, the text 'MASTERING HSC MATHEMATICS' is written in white, followed by 'YEAR 11 EXTENSION 1 MATHEMATICS' in green. At the bottom, it says 'NEW STAGE 6 HSC SYLLABUS FOR STUDENTS AND TEACHERS' in white.

11

MASTERING  
HSC MATHEMATICS

YEAR 11 EXTENSION 1 MATHEMATICS

NEW STAGE 6 HSC SYLLABUS  
FOR STUDENTS AND TEACHERS

Revised Editions for the new syllabus

# INDIGENOUS PEDAGOGIES IN MATHEMATICS

MANSW is proud to partner with Australians Together to offer a new professional learning experience: Indigenous Pedagogies, running for the first time on Monday 22 June.

This course represents an important step in supporting teachers to engage meaningfully with Aboriginal and Torres Strait Islander perspectives within the mathematics classroom.

For many teachers, this is an area of genuine interest — but also uncertainty. Questions often arise:

- Where do I start?
- How do I ensure authenticity?
- How can this enhance, rather than sit alongside, my existing teaching?

This course has been designed to address these questions with both care and clarity.

Working alongside Australians Together, participants will explore ways to build confidence and embed practices that are respectful, accurate, and connected to mathematical thinking. The focus is not on adding content, but on enriching understanding — recognising that teaching mathematics exists within culture, history, and context.

Importantly, this is not about having all the answers. It is about taking meaningful steps forward in our practice.

As educators, we play a key role in shaping how students see the world — and their place within it. Engaging with Indigenous Pedagogies is an opportunity to broaden that view, while strengthening the relevance and depth of the mathematics we teach to all students.

Join us for this timely opportunity to take a meaningful step forward in your teaching practice. Register today!

<https://tinyurl.com/IndigenousPedagogies>



# WHAT OUT-OF-FIELD TEACHERS TEACH US ABOUT TEACHING MATHEMATICS

Supporting out-of-field mathematics teachers is a complex and important part of our work as a profession.

There is no single story. Some teachers teaching mathematics outside their field understandably find the content challenging. At times, this can lead to a reliance on textbooks or a hesitation in explaining ideas beyond procedural steps. These are real challenges, and they highlight the need for strong, ongoing support.

But this is only part of the picture.

Through the SCU Microcredential and MANSW courses, I've had the opportunity to work closely with out-of-field teachers who have actively chosen to engage with mathematics — to build their knowledge, reflect on their practice, and improve outcomes for their students. And what stands out is not what they lack, but what they bring.

Many of these teachers naturally lean into pedagogies that we know support effective mathematics learning. They are deliberate in their use of language, explicitly building mathematical literacy. They draw on multiple representations — diagrams, visuals, concrete materials — to make ideas accessible.

They encourage students to talk, to explain, and to make sense of concepts together.

These approaches align closely with research-informed practices, including the use of representations and manipulatives, structured mathematical discussion, and making connections across ideas.

There is also a strong sense of curiosity in the way they approach teaching. Questions of “why” are common — why a method works, why a concept is introduced in a particular way, how ideas connect across topics or even across subjects. These questions often prompt deeper reflection, both for themselves and for those around them.

This creates a positive dynamic within faculties that value professional discourse. Out-of-field teachers bring fresh perspectives and a willingness to think differently. They can prompt valuable professional conversations, encouraging all of us to be more explicit, more connected, and more thoughtful in our teaching.

# WHAT OUT-OF-FIELD TEACHERS TEACH US ABOUT TEACHING MATHEMATICS

Of course, this doesn't remove the need for support. Content knowledge matters, and developing confidence with the mathematics itself is an essential part of the journey. What is clear, however, is that when teachers are supported — through structured professional learning, collaboration, and access to networks — they are able to build both their understanding and their effectiveness in the classroom.

At MANSW, we continue to work with out-of-field teachers through targeted professional learning and dedicated networks. The goal is not to “fix” a problem, but to support growth — recognising both the challenges and the strengths that these teachers bring.

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## Just ask Us

"We didn't realise you could do that" is a phrase we often hear from the schools we visit. At MANSW, we don't believe in one-size-fits-all programs; we believe in support designed around your specific context and priorities.

The truth is — if it relates to mathematics teaching and learning or developing teachers and leaders there's a very good chance we can support you.

A MANSW consultancy is grounded in real classrooms and real constraints. Our goal is to provide strategies that teachers can use immediately, whether through a single session or a long-term partnership focused on sustained improvement.

What can they look like?

- Targeted Professional Learning: Days designed specifically for your staff's needs.
- Curriculum Reviews: Analyzing programs, scope and sequences, or assessment tasks.
- In-Class Support: Lesson observations and demonstration lessons.
- Staff Mentoring: Support programs for early career or out-of-field teachers.

If you aren't sure exactly what you need yet, start with a conversation. Tell us what is challenging your team and where you'd like to go next. From there, we can build something together that supports your staff and makes a genuine difference for your students.

Sometimes the most powerful step is simply asking the question:  
What can a MANSW Consultancy do for me?

<https://tinyurl.com/MANSWConsultancy>





# THE HARDEST JOB IN SCHOOL - AND WHY MIDDLE LEADERS MATTER

## How MANSW supports middle leaders

The themes explored in this episode closely align with MANSW's ongoing work supporting mathematics middle leaders across NSW. Through sustained professional learning, school-based partnerships and leadership-focused initiatives, MANSW works alongside teachers in Head Teacher, Assistant Principal and coordinator roles to strengthen both their instructional leadership and their capacity to lead people well.

MANSW's approach recognises that leadership development is not about providing templates or quick fixes. Instead, it is about creating spaces where middle leaders can:

- clarify their role and influence
- deepen their understanding of effective mathematics pedagogy
- build relational and instructional leadership skills
- connect with other leaders facing similar challenges

By investing in middle leadership, MANSW contributes directly to improved teaching quality, coherent curriculum implementation and stronger professional cultures within schools.

Middle leadership may well be one of the hardest jobs in school – but, as this podcast episode makes clear, it is also one of the most important. MANSW is proud to continue supporting mathematics leaders in the middle, where meaningful change so often begins.



[Listen to the podcast](#)



# Faculty Review



Mathematical Association of NSW



## Strong mathematics faculties don't happen by accident. They are built deliberately.

Built by leaders who value mathematics.

Built by faculties who use data to inform teaching.

Built by teachers who focus on developing conceptual understanding, not just procedures.

Built by schools that invest in discipline-specific professional learning and collaboration.

MANSW's Mathematics Faculty Reviews are designed to help schools see clearly how these design choices are playing out in their own context.

**These are not quick fixes. They are design choices.**

Our consultants work with leadership teams and mathematics faculties to examine:

- How mathematics is experienced in classrooms
- How well programs support conceptual understanding and mastery
- How data is used to inform direction
- How professional learning and collaboration support teacher growth
- How mathematics leadership is positioned within the school

A MANSW review is not an audit.

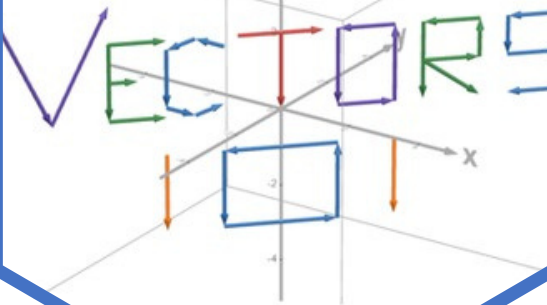
It is an expert, mathematics-specific lens that helps faculties recognise strengths and identify practical next steps for improvement.

If your school is looking to strengthen mathematics teaching and learning in a deliberate, evidence-informed way, we would love to work with you.

[Enquire about a MANSW Mathematics Faculty Review.](#)

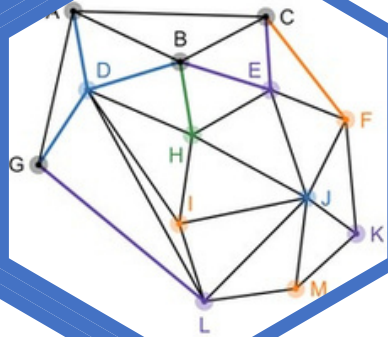
# ONLINE COURSES

NEW!!



Wages

	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10:00 am	10:00 am			10:00 am	10:00 am	
5:00 pm	2:00 pm			5:00 pm	5:00 pm	
	7.00	4.00	0.00	0.00	7.00	7.00
total pay rate	16.00					
mid-shift rate	7.00					
overtime rate	7.00					



Coming Soon

Calculus  
101

**SELF-PACED**

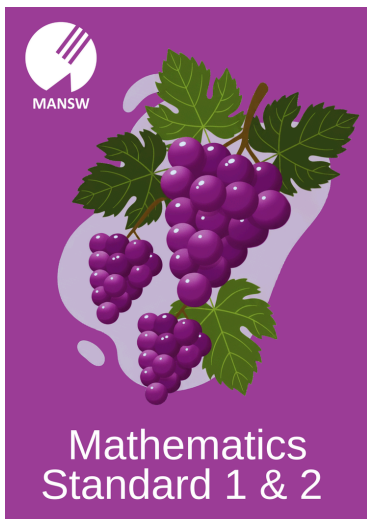
**ACCESS AT ANY TIME**

- Vectors 101 (NEW) ✓
- Spreadsheets 101 ✓
- Exploring Networks ✓
- Area Models ✓
- Statistics 101 ✓
- Calculus 101 (Coming soon) ✓

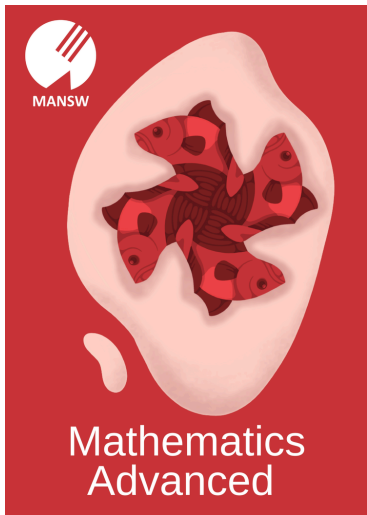
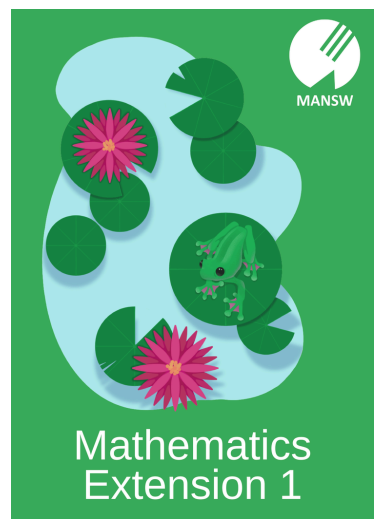
**REGISTER NOW**

[www.mansw.nsw.edu.au](http://www.mansw.nsw.edu.au)





# Support for HSC Students



## HSC Revision Lectures



Learn from experienced teachers who understand exactly what it takes to succeed.

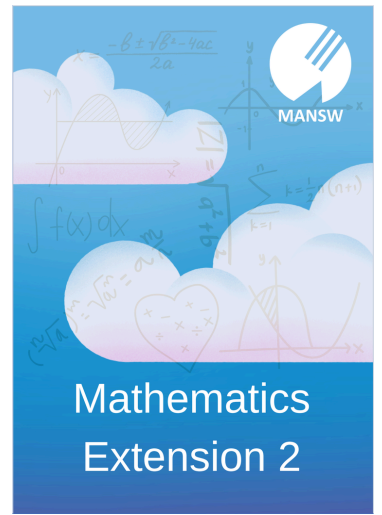
Get clear explanations, exam tips, and techniques that help you maximise every mark.

## Online HSC Revision Program

Every question from the 2020–2024 HSC exams fully explained.

Organised by topic for targeted revision.

Self-paced learning, study anytime. 24/7 access with videos, notes, and practice quizzes.



Mathematical Association of NSW Inc

Promoting Quality Mathematics Education for All

## MATHEMATICAL ENRICHMENT DAY YEAR 12 MATHEMATICS EXTENSION 1 and 2 STUDENTS



Monday 15 June 2026 @ Macquarie University

On the day, students will:

- Explore fascinating real-world applications of mathematics
- Discover mathematics beyond the syllabus
- Learn how their studies open doors to rewarding careers
- Choose two elective talks aligned with Stage 6 content
- Connect with like-minded students from other schools



MACQUARIE University

(YOU)<sup>us</sup>  
60 YEARS

# Fun and Engaging Maths Incursions

Perfect for your Maths Week  
or Maths Day Celebrations

If you're looking for something a bit different in maths, why not let **Felstead Education** come to you and deliver a unique incursion that is:

- ✓ Fun, engaging and interactive
- ✓ Packed with great maths challenges and puzzles
- ✓ Designed to build problem-solving and reasoning skills
- ✓ Aligned to the curriculum
- ✓ Easy to organise – we come to you and handle everything



## Our Programs



### The Maths Show

A high-energy performance full of maths magic, history, puzzles and surprises.



### The Maths Escape Room

An immersive experience combining teamwork, adventure and mathematical thinking.



### The Junior Maths Show

Designed for younger students (Prep to Year 2), with highly interactive fun.



### The Amazing Maths Race

A high energy event where students solve maths challenges moving around the school.






Tailored versions available for Primary and Secondary students (Prep to Year 10).

**Proudly sponsored by MANSW**  
with discounts available for members.



## Get in Touch

 [www.felstead.com.au/maths](http://www.felstead.com.au/maths)  
 [info@felstead.com.au](mailto:info@felstead.com.au)  
 0402 223 406

“*Fantastic. The children were very engaged and loved it!*”  
– Karen Harrandence,  
Deputy Principal, Jerrabomberra PS

