

**DRAFT QAMT Virtual Day (via TEAMS TBC) – Fri 21 June**

Time	Room 1 (Snr secondary)	Room 2 (Primary and Jnr Secondary)	Room 3 (Mixture)
8:30 -9	Registration		
9:00-9:55	Break out Rooms 1		
	Familiarisation with the QCE 2025 Mathematics syllabuses – Essential, General, Mathematical Methods and Specialist Mathematics– Robyn McNamara and Warren Richards, QCAA Extended workshop (Senior Secondary)	Maths in Schools: Culturally Responsive Maths Pedagogy – Maths in Schools (Years P-6)	Strategies to support Indigenous Learners in mathematics - Terry Bell, Matika Frid and Dr Sharon Dekkers (Secondary)
10-10:55		Break out Rooms 2	
		Our learnings from early implementation of v9, and how we are building mathematical confidence to set students up for success- Alexander O'Connor, Sunshine Coast Grammar (Years 7-10)	Algebra tiles – CRA using digital tools– Paulina Sliedrecht, QAMT (Years 6-9)
11-12pm	Break		
12-12:55	Break out Rooms 3		
	Statistical software for data investigations Assoc Professor Michael Bulmer, UQ (Senior Secondary)	Developing quality assessment: Creating questions using degree of difficulty Prep–Year 6- Tania Russell, QCAA (Years P-6)	Engage and extend your students with QAMT/AAMT Student activities (All)
1 – 1:55	Break out Rooms 4		
	Teacher Supporting Teachers - Narelle Morris (Senior Secondary)	Developing quality assessment: Creating questions using degree of difficulty Years 7–10 - Tania Russell, QCAA (Years 7-10)	Supporting teachers teaching mathematics out-of-field: Initial outcomes from an innovative microcredential approach. – Dr Lewes Paddell, SCU (Years 7-12)
2-2:30	Break		
2:30-3:25	Break out Rooms 5		
	Maths in Schools: Culturally Responsive Maths Pedagogy – Maths in Schools (Years 7-9)	Hands on primary mathematics topic TBC - Monique Russel, QAMT (Primary)	Justification of aspects of Mathematical Modelling Dr Timm Lehmann - QUT
3:30-3:45	Closing and thanks		

**Draft Program for QAMT State Conference 2024 – Gold Coast Teacher’s Day – Shared day – Wed 3 July (QAMT Gold Coast F2F Day 1)**

<b>Time</b>					
8:00	Registration				
8:30	Welcome and admin				
9-9:50	<b>Keynote - Beth Southwell Practical Implications Award (organised by MERGA and AAMT)</b>				
9:50-10 10-10:30	<b>Introductions and Texas Instruments address</b> <b>Professor Merrilyn Goos - What we share in common.</b> The aim of this session is to break down barriers between the researchers and teachers and set the mood of the day as one of sharing and collaboration toward a common goal.				
10:30-11:30	Morning tea (larger meal) - networking				
11:30-12:20	Break out room session 1				
	<b>Rooms 1 – 4</b>	<b>Room 5</b>	<b>Room 6</b>	<b>Room 7</b>	<b>Room 8</b>
	<b>MERGA Program (TBC)</b>	Reverse Problem Solving and Modelling Tasks - Tiffany Beck and Karleigh Nicholls, Fairholme College (Years 7-12)	Engagement and Empowerment through Questioning - Peter Fox, Texas Instruments (trade)	AC9 processes/Mathematical Modelling - Presenter TBC (Years P-6)	<b>11:30-1:20 Master Class</b> Active/action Research – What, why and how with examples from teacher researchers
12:30 – 1:20	Break out room session 2				
	<b>MERGA Program (TBC)</b>	Using Microbits and Programming using Python in Junior Mathematics - Rodney Anderson, Moreton Bay College (Years 7-10)	TBC - Jacaranda (trade)	AC9 proficiencies/Computational thinking – Presenter TBC (Years P-10)	
1:30-2	Lunch (smaller meal) - networking				
2-2:50	Break out room session 3				
	<b>MERGA Program (TBC)</b>	Using assessment to develop a deeper understanding of fractions. Michael Nelson, Drysdale Primary School (Years P-6)	WHAT’S NEW IN QCE MATHS? Anna Wethereld and Robert Yen, Nelson Cengage (Years 10-12) (trade)	Promoting Critical Mathematical Thinking in the Classroom Part 1 - Prof Vince Geiger, Thorsten Scheiner and Katherine Fernandez ACU (Years P-10)	<b>2-3:50 Master Class</b> Building Thinking Classrooms – Panel and sharing
2-2:50	Break out room session 4				
3-3:50	<b>MERGA Program (TBC)</b>	Hands on Mathematics – Monique Russell (Primary)	AC9 processes/Statistics and probability – Presenter TBC (Years P-10)	Promoting Critical Mathematical Thinking in the Classroom Part 2 - Prof Vince Geiger, Thorsten Scheiner and Katherine Fernandez ACU (Years P-10)	
3:50-4:10	Thanks and closing				
4:10	Networking Drinks - sponsored by reSolve				
6:30 – 9pm	Conference Dinner – Southport Yacht Club, The Compass Room				

**Draft Program for QAMT State Conference 2024 – Thur 4 July (QAMT Gold Coast F2F Day 2)**

Time	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6
8:30 -9	Registration					
9:00-9:50	Break out Room session 5					<b>9-11 Master Class</b>  AC9 panel and sharing What is working and what challenges we have faced.
	Mathemagics, Scott Wiggins, West Moreton Anglican College (Years 7-12)	Interrogating the meaning of "success" within mathematics education – Doctoral Research, Rebecca Burtenshaw, USC	Mathematical Modelling Peter Fox, Texas Instruments and Dan Wilkie, teacher in South Carolina, USA (trade)	How to teach writing in maths -Esther Hohenheim, Assumption College Warwick (Years 7-12)	Introducing the Binomial Distribution Effectively with Technology - Peter Flynn, Educational Consultant (Senior Secondary)	
10-10:50	Break out Room session 6					
	Developing quality assessment: Creating questions using degree of difficulty Years 7–10 – Tania Russell, QCAA	Implementation of BTC (working title) - Wendy-Lou Wescombe, Pacific Lutheran College	Kicking goals with trigonometry: video-enabled maths in the real world. Alastair Lupton, Adelaide Botanic High School, for CASIO (trade)	Low Prep, High Yield Games that Kids Love - Cath McKenna, Mountain Creek State School (Years P-6)	Hands-on activities in Maths Methods and Specialist Maths with Graphics Calculators Mellissa Hourigan, Murrumba State Secondary College (Senior Secondary)	
11-12pm	Brunch					
12-12:50	Break out Room session 7					<b>12-1:50 Master Class</b> Assessment - panel discussion and chance for moderation
	Developing quality assessment: Creating questions using degree of difficulty Prep–Year 6 – Libby Foley, QCAA	Maths in Schools: Culturally Responsive Maths Pedagogy – Maths in Schools (Years 7-10)	Relevant practice supporting AC V9 success - Essential Assessment (Years P-9) (trade)	Making Maths Memorable - Alexis Evans, Caboolture State High School (Years 7-12)	Integrated curriculum design effecting senior higher-level mathematics selection - Chris Powell, UQ (Senior Secondary)	
1 – 1:50	Break out Room session 8					
	Strategies to remove barriers to female selection of STEM subjects- Evan Shellshear, Ubidy (Years 7-12)	Maths in Schools: Culturally Responsive Maths Pedagogy – Maths in Schools (Years P-6)	New Calculator, new emulator, what’s the deal? Alastair Lupton, Adelaide Botanic High School, for CASIO (trade)	Topic TBC -working topic STEM success stories from GC schools, facilitated through Griffith University	Topic TBC - Tom Sprenger, Gregory Terrace (Senior Secondary)	
1:50-2:10	Afternoon Tea					
2:10-2:20	<b>CASIO Address</b>					
2:20-3:15	<b>Bill Simpson Closing Address– Greg Bland</b>					

3:15-3:30	Thanks and Closing
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**Draft Program for QAMT State Conference 2024 – Friday 5 July (QAMT Gold Coast F2F – Excursion/Incurion Day)**

Time	Room 1	Room 2	Off site (meet at HOTA)
9-12 MASTER CLASSES  <b>Morning Tea Provided</b>	<b>Maths300 – AAMT</b>  <b>Presenter:</b> Denise Haliday	<b>reSolve – A new look and a new approach</b>  <p>A new reSolve is coming in 2024! This means new professional learning and new teaching sequences. It also means a new pedagogical approach for the program. In this interactive masterclass, we present our new approach to mathematical inquiry developed by the reSolve team in collaboration with international researchers. Participants will explore the brand-new reSolve website, engage in mathematical tasks, and unpack a set of student inquiry practices that we use through our new materials. We show that an inquiry in mathematics employs many different pedagogical tools.</p> <b>Presenters:</b> Kristen Tripet and Naomi Fitzgerald	<b>Home of the Arts (HOTA)</b>  <p>This session ignites a dynamic approach to mathematics education, harnessing the rich world of Arts as a powerful stimulus for deep learning. Explore how visual arts and performance can be woven into the curriculum to cultivate essential 21st-century skills alongside key ACARA Version 9 curriculum concepts. We'll explore how applications of mathematical modelling translate to real-world artistic problems, as well as the ways we can develop critical computational thinking skills through artistic exploration, process, sequencing and analysis.</p> <p>This session offers practical strategies and resources to seamlessly integrate the arts into your math programs. Join us as we explore the power of the Arts to support accessible and engaging mathematics learning experiences for students of all backgrounds and abilities, as well as how we can foster collaboration, communication, reasoning, problem-solving and innovation through artistic inquiry.</p> <b>Presenter:</b> Carla Spano

## Virtual Program Presentation Abstracts

Presentation Time and Room	Presenter Name, organisation and Bio	Prestation Title and Abstract	Session Audience
<b>Session 1: 9-9:55am</b>			
Room 1 9-10:55am Extended workshop	Warren Richards and Robyn McNamara – Queensland Curriculum and Assessment Authority (QCAA)	<p><b>Familiarisation with the QCE 2025 Mathematics syllabuses – Essential, General, Mathematical Methods and Specialist Mathematics</b></p> <p>These two presentations will focus on key elements of the revisions to the QCE Senior Mathematics syllabuses, including:</p> <ul style="list-style-type: none"> <li>• inclusion of formulas within the subject matter</li> <li>• rearrangement of subject matter</li> <li>• clarification of subject matter</li> <li>• removal of subject matter</li> <li>• update of formula book for each subject</li> <li>• update of internal assessment specifications and conditions</li> <li>• update of ISMGs (and ISS) for internal assessments.</li> </ul> <p>Approaches to implementation of the revised syllabuses with respect to assessment considerations will be incorporated within the discussion. Teachers will also have opportunity to ask questions related to these revisions.</p> <p>AITSL standards</p> <ol style="list-style-type: none"> <li>2. Know the content and how to teach it</li> <li>3. Plan for and implement effective teaching and learning</li> <li>5. Assess, provide feedback and report on student learning</li> <li>6. Engage in professional learning</li> </ol>	Years 11-12
Room 2	Maths in Schools (TBC)	<p><b>Maths in Schools: Culturally Responsive Maths Pedagogy</b></p> <p>Join us for a hands-on workshop learning about culturally responsive maths pedagogies for the primary classroom. Make Maths authentic and meaningful for your students – find ways to connect to culture and everyday maths. We also explore a range of digital tools and you will learn about Version 9.0 Australian Curriculum’s shared focus between Digital Technologies and Maths.</p>	Years P-6
Room 3	Terry Bell, Matika Frid and Dr Sharon Dekkers	<p><b>Strategies to support Indigenous Learners in mathematics</b></p>	All
<b>Session 2: 10-10:55am</b>			
Room 2	Alexander O'Connor, Sunshine Coast Grammar	<p><b>Our learnings from early implementation of v9, and how we are building mathematical confidence to set students up for success</b></p>	Years 7-10

		Our school has implemented v9 of ACARA in 2024 across all of Math 7-10. This has come with a number of challenges that we have had to overcome and opportunities that have allowed us to tackle the problems of lower math confidence in students. This workshop will share our learnings and experiences to help others make the transition.	
Room 3	Paulina Sliedrecht, QAMT	Algebra tiles – CRA using digital tools	Years 5-10
Session 3: 12-12:55pm			
Room 1	Assoc Professor Michael Bulmer, UQ	<b>Statistical software for data investigations</b>	Years 10-12
Room 2	Tania Russell, Queensland Curriculum and Assessment Authority (QCAA)	<b>Developing quality assessment: Creating questions using degree of difficulty Prep–Year 6</b> When designing quality supervised assessments in Mathematics, teachers ensure task validity through alignment to the Australian Curriculum v9.0: Mathematics and the creation of questions using degree of difficulty — simple familiar, complex familiar and unfamiliar. This workshop will provide opportunities for teachers and curriculum leaders to examine sample questions that demonstrate how a question is aligned to the curriculum and the degree of difficulty definitions. Practical strategies for the creation of valid Mathematics questions will also be explored.	Years P-6
Room 3	TBC	<b>QAMT/AAMT engagement</b> – TsT, student activities, Maths300	All
Session 4: 1-1:55pm			
Room 1	Narelle Morris	Teacher Supporting Teachers (Senior Secondary)	Years 10-12
Room 2	Tania Russell, Queensland Curriculum and Assessment Authority (QCAA)	<b>Developing quality assessment: Creating questions using degree of difficulty Years 7–10</b> When designing quality examinations in Mathematics, teachers ensure task validity through alignment to the Australian Curriculum v9.0: Mathematics and the creation of questions using degree of difficulty — simple familiar, complex familiar and complex unfamiliar. This workshop will provide opportunities for teachers and curriculum leaders to examine sample questions that demonstrate how a question is aligned to the curriculum and the degree of difficulty definitions. Practical strategies for the creation of valid Mathematics questions will also be explored.	Years 7-10
Room 3	Dr Lewes Paddell, SCU	<b>Supporting teachers teaching mathematics out-of-field: Initial outcomes from an innovative microcredential approach.</b> Teachers teaching mathematics out of their field who wish to improve their practice can undertake professional learning ranging from self-directed initiatives to single events and community-of-practice-like school-based learning and even embark on a multi-year retraining program. However, there is a pressing need for a middle ground where outcomes such as improved practice, increased confidence, and emerging connections	Years 7-12

		to a network of mathematics teachers can be realised through a sustained and manageable program. This session will overview and share the outcomes of such a program—a 12-week microcredential run in the first part of 2024—designed and piloted at Southern Cross University in partnership with the Mathematical Association of NSW, with funding support from the Commonwealth Government.	
Session 5: 2:30-3:25pm			
Room 1	Maths in Schools (TBC)	<b>Maths in Schools: Culturally Responsive Maths Pedagogy</b> Join us for a hands-on workshop learning about culturally responsive maths pedagogies for the secondary classroom. Make Maths authentic and meaningful for your students – find ways to connect to culture and everyday maths. We also explore a range of digital tools and you will learn about Version 9.0 Australian Curriculum’s shared focus between Digital Technologies and Maths.	Years 7-9
Room 2	Monique Russel, QAMT	Hands on primary mathematics topic TBC	Years P-6
Room 3	Dr Timm Lehmann - QUT	Justification of aspects of Mathematical Modelling (TBC)	TBC

**Presentation Abstracts from Day 1 Teacher's Day – Shared day – Wed 3 July**

<b>Presentation Time and Room</b>	<b>Presenter Name, organisation and Bio</b>	<b>Prestation Title and Abstract</b>	<b>Session Audience</b>
10-10:30am Lecture Theatre	Professor Merrilyn Goos	<b>What we share in common</b> (working title). The aim of this session is to break down barriers between the researchers and teachers and set the mood of the day as one of sharing and collaboration toward a common goal.	All
<b>Session 1: 11:30-12:20</b>			
Room 5	Tiffany Beck and Karleigh Nicholls, Fairholme College	<b>Reverse Problem Solving and Modelling Tasks</b> With PSMT's contributing significant marks towards a students' ATAR, this session will take you on a reverse journey towards understanding the criteria and task through a student perspective. The students will put on the 'marking hat' and delve into guided practice by analysing multiple exemplars. In this session you will walk away with data from an implemented case study and documents to help you and your students start your own reverse PSMT experience.	Years 7-12
Room 6	Peter Fox, Texas Instruments Trade Session	<b>Engagement and Empowerment through Questioning</b> How can we extract the "what if" from students that may otherwise be compliant to the extraverts? A combination of anonymity, inclusiveness and questioning techniques will be used to explore how to engage the whole class.	Years 7-12
Room 7	TBC	AC9 processes/Mathematical Modelling - Primary	Years P-6
Masterclass 11:30-1:20 Room 8	TBC	Active/action Research – why and how with examples from teacher Researchers	All
<b>Session 2: 12:30-1:20</b>			
Room 5	Rodney Anderson, Moreton Bay College	<b>Using Microbits and Programming using Python in Junior Mathematics</b> Who thought that four lines of Python programming and with a Microbit you could determine the angle of elevation (Who needs clinometers?)? During this session we will program using Python and also use calculators attached to a Microbit to investigate Mathematical concepts.	Years 7-10
Room 6	Jacaranda Trade Session	TITLE TBC ABSTRACT TBC	
Room 7	TBC	AC9 proficiencies/Computational thinking	Years P-10
<b>Session 3: 2-2:50</b>			
Room 5	Michael Nelson, Drysdale Primary School	<b>Using assessment to develop a deeper understanding of fractions.</b>	Years P-6



		How do we know when students truly 'understand' fractions? This presentation will allow teachers to use high-quality, evidence-based assessments to ensure their students have a deep understanding of fractions.	
Room 6	Anna Wethereld and Robert Yen - Nelson Cengage Trade Session	<b>WHAT'S NEW IN QCE MATHS?</b> Have you caught up with the changes to the QCE maths syllabuses to be implemented from next year? Nelson Maths author Anna Wethereld and publisher Robert Yen will tell you what's new and different about the revised senior maths courses Essential Maths, General Maths and Maths Methods. Learn about how the new Nelson Maths 11-12 series approaches QCE maths through an exam focus and a pedagogy that is backed by research into the science of learning.	Years 10-12
Room 7	Prof Vince Geiger, Thorsten Scheiner and Katherine Fernandez ,ACU	<b>Promoting Critical Mathematical Thinking in the Classroom Part 1</b> This session, part of a project funded by the Australian Research Council, is aimed at mathematics teachers who want to improve their skills in promoting students' critical thinking in mathematics. It provides professional development on Critical Mathematical Thinking (CMT), teacher noticing skills and identifying CMT in classroom situations. CMT involves the use of mathematical reasoning to solve complex real-world problems, including considerations of societal benefit, ethics and social justice, and aligns with the Australian Curriculum's focus on critical and creative thinking, numeracy and sustainability. Participants will also practise using a CMT Noticing Instrument. This session will directly address two aspects of the Australian Curriculum – the General Capabilities of Numeracy, and Critical and Creative Thinking, the Cross-curricular Priority of Sustainability. Practical examples will be provided of how these aspects of the Australian Curriculum can be included in mathematics classrooms. Please bring your laptop to this session.	Years P-10
Masterclass 2-3:50 Room 8	TBC	Building Thinking Classrooms – Panel and sharing	All
<b>Session 4: 3-3:50</b>			
3-3:50 Room 5	Monique Russell, QAMT	Hands on Mathematics (working Title)	Years P-6
3-3:50 Room 6	TBC	AC9 processes/Statistics and probability	All
3-3:50 Room 7	Prof Vince Geiger, Thorsten Scheiner and Katherine Fernandez, ACU	<b>Promoting Critical Mathematical Thinking in the Classroom Part 2</b> This session, part of a project funded by the Australian Research Council, is aimed at mathematics teachers who want to improve their skills in promoting students' critical thinking in mathematics. It provides professional development on Critical Mathematical	All

		<p>Thinking (CMT), teacher noticing skills and identifying CMT in classroom situations. CMT involves the use of mathematical reasoning to solve complex real-world problems, including considerations of societal benefit, ethics and social justice, and aligns with the Australian Curriculum’s focus on critical and creative thinking, numeracy and sustainability. Participants will also practise using a CMT Noticing Instrument. This session will directly address two aspects of the Australian Curriculum – the General Capabilities of Numeracy, and Critical and Creative Thinking, the Cross-curricular Priority of Sustainability. Practical examples will be provided of how these aspects of the Australian Curriculum can be included in mathematics classrooms.</p> <p>Please bring your laptop to this session.</p>	
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## Presentation Abstracts from Day 2

Presentation Time and Room	Presenter Name, organisation and Bio	Prestation Title and Abstract	Session Audience
Session 5: 9-10am			
Room 1	Scott Wiggins, West Moreton Anglican College	<p><b>Mathemagics</b></p> <p>The aim of this session is to present another array of intriguing number tricks that could be used with a middle or upper secondary class to increase student interest. These include: how to quickly square, calculate the square root of and multiply certain types of integers without the use of a calculator. If time, use of a mnemonic for reciting the first 100 digits of <math>\pi</math> will also be discussed.</p>	Years 7-12
Room 2	Rebecca Burtenshaw, USC	<p><b>Interrogating the meaning of "success" within mathematics education</b></p> <p>This session is part of a PhD research project investigating the meaning of "success" in mathematics education and how success is determined in mathematics education. Through hands-on activities, this focus group seeks to explore educators' experiences and ideas on the indicators of valuable mathematics learning and whether these manifestations provide adequate measures of students' learning success.</p>	Years P-12
Room 3	Peter Fox, Texas Instruments and Dan Wilkie, teacher in South Carolina, USA Trade Session	<p><b>Mathematical Modelling</b></p> <p>Come along and enjoy the ride. From bouncing balls to flying high, the journey will stimulate, engage and captivate in more ways than one. We will look at different ways to capture and share data that can be modelled by linear, quadratic or trigonometric functions. Caveat: If you're looking at flying any time soon, you may want to bale on this session.</p>	Years 9-12
Room 4	Esther Hohenheim, Assumption College Warwick	<p><b>How to teach writing in maths</b></p> <p>With the ever increasing importance of the PSMT not only in senior but throughout the version 9 curriculum it is time to face the terrifying truth...us Maths teachers need to teach writing. But where to start? And how do we bring these crucial writing skills into our Maths lessons? I'm hoping to make the teaching of these skills less scary and more accessible to classroom Maths teachers.</p>	Years 7-12
Room 5	Peter Flynn, Educational Consultant	<p><b>Introducing the Binomial Distribution Effectively with Technology</b></p> <p>In this session, strategies and approaches for introducing the binomial probability distribution effectively will be showcased. A central focus of the session will involve demonstrating how the use of technology can achieve positive learning outcomes.</p>	Years 11-12
Masterclass 9-10:50 Room 6	TBC	<p><b>AC9 panel and sharing</b></p> <p>What is working and what challenges we have faced.</p>	Years P-10
Session 6: 10-10:50			

Room 1	Tania Russell, Queensland Curriculum and Assessment Authority (QCAA)	<b>Developing quality assessment: Creating questions using degree of difficulty Years 7–10</b> When designing quality examinations in Mathematics, teachers ensure task validity through alignment to the Australian Curriculum v9.0: Mathematics and the creation of questions using degree of difficulty — simple familiar, complex familiar and complex unfamiliar. This workshop will provide opportunities for teachers and curriculum leaders to examine sample questions that demonstrate how a question is aligned to the curriculum and the degree of difficulty definitions. Practical strategies for the creation of valid Mathematics questions will also be explored.	Years 7-10
Room 2	Wendy-Lou Wescombe, Pacific Lutheran College	<b>Implementation of BTC (working title)</b> Talking about the obstacles associated with the implementation of BTC in a teaching area where there are more traditionalists. From colleagues, parents but then most of all your own self doubt and knowing that a return to what you know is a safe.	Years 3-12
Room 3	Alastair Lupton, Adelaide Botanic High School, for CASIO Trade Session	<b>Kicking goals with trigonometry: video-enabled maths in the real world</b> “Do maths in the real world” is the cry - it adds meaning, relevance, and challenge, they say - sounds good in theory – but what if I don’t like excursions? Video is a great way of taking our students to the interesting real-world places, without leaving the classroom (and filling out a bunch of risk assessments), like this visit to the rugby field, where a conversion kick is being attempted. This workshop will share a video treatment of the “rugby kick” problem, a lovely piece of applied right-angled trigonometry and includes ‘teacher edition’ notes and all you need for a great lesson, or a nice little assessment task.	Years 10-12
Room 4	Cath McKenna, Mountain Creek State School	<b>Low Prep, High Yield Games that Kids Love</b> Want ideas for no fuss games and warm up routines that students at different levels can access (high ceiling low floor)? Activities that focus on Place Value and Computational Thinking to build number sense and self confidence in our children. A practical hands-on session where you will walk out the door with something you can use Monday morning.	Years P-6
Room 5	Mellissa Hourigan, Murrumba State Secondary College	<b>Hands-on activities in Maths Methods and Specialist Maths with Graphics Calculators</b> This session will look at some activities we can do in our Methods and/or Specialist Maths classes to help students visualise and understand the concepts we are teaching. The activities will incorporate the use of graphics calculators.	Years 10-12
<b>Session 7: 12-12:50</b>			
Room 1	Libby Foley, Queensland Curriculum and Assessment Authority (QCAA)	<b>Developing quality assessment: Creating questions using degree of difficulty Prep–Year 6</b> When designing quality supervised assessments in Mathematics, teachers ensure task validity through alignment to the Australian Curriculum v9.0: Mathematics and the creation of questions using degree of difficulty — simple familiar, complex	Years P-6

		familiar and unfamiliar. This workshop will provide opportunities for teachers and curriculum leaders to examine sample questions that demonstrate how a question is aligned to the curriculum and the degree of difficulty definitions. Practical strategies for the creation of valid Mathematics questions will also be explored.	
Room 2	Maths in Schools (TBC)	<b>Maths in Schools: Culturally Responsive Maths Pedagogy</b> Join us for a hands-on workshop learning about culturally responsive maths pedagogies for the secondary classroom. Make Maths authentic and meaningful for your students – find ways to connect to culture and everyday maths. We also explore a range of digital tools and you will learn about Version 9.0 Australian Curriculum’s shared focus between Digital Technologies and Maths.	Years7-10
Room 3	Jacqueline Clark, Essential Assessment Trade Session	<b>Relevant practice supporting AC V9 success</b> In this workshop, we translate education research into relevant and practical information for educators to improve student learning outcomes aligned with the Australian Curriculum Version 9 in Mathematics. We unpack the science of learning, explore cognitive research and demonstrate how our resources help to identify student understanding, grow numeracy skills, and support data-informed instructional decisions. Essential Assessment supports the practical implementation of AC V9 and your success in the teaching and learning of Numeracy.	YearsP-9
Room 4	Alexis Evans, Caboolture State High School	<b>Making Maths Memorable</b> Ideas for teachers to engage students in learning in a high school classroom in a memorable way.	Years 7-12
Room 5	Chris Powell, UQ	<b>Integrated curriculum design effecting senior higher-level mathematics selection.</b> Current research project looking at the effect of integrated STEM curriculum design on achievement, engagement and retainment in senior higher level mathematics subjects. Data is being collected to determine if there is a correlation between learning mathematics through integrated STEM units in Year 7-10 and students' selection of higher level mathematics in Year 11 and 12. If there is a correlation, what are the requirements in schools to implement Intergrated units of work in Year 7-10?	Years 7-12
Masterclass 12-1:50 Room 6	TBC	Assessment - panel discussion and chance for moderation	All
<b>Session 8: 1-1:50</b>			
Room 1	Evan Shellshear, Ubidy	<b>Strategies to remove barriers to female selection of STEM subjects</b> This workshop will present the approaches and strategies (discovered from a study of female STEM students at the Gap State High School) for removing the barriers to the	Years 7-12

		selection of STEM subjects by young women. Although only a small and initial study, the insights gained correspond to the findings in the international literature. As an example of applying the results we compare them to current federal policy and provide recommendations.	
Room 2	Maths in Schools	<b>Maths in Schools: Culturally Responsive Maths Pedagogy</b> Join us for a hands-on workshop learning about culturally responsive maths pedagogies for the primary classroom. Make Maths authentic and meaningful for your students – find ways to connect to culture and everyday maths. We also explore a range of digital tools and you will learn about Version 9.0 Australian Curriculum’s shared focus between Digital Technologies and Maths.	Years P-6
Room 3	Alastair Lupton, Adelaide Botanic High School, for CASIO Trade Session	<b>New Calculator, new emulator, what’s the deal?</b> Along with the new fx-8200 AU, the scientific calculator making its way into the hands of Australian teachers and students over the last year or so, Casio has released a new approach to calculator emulation, a vital part of technology use in the classroom. Housing the 8200 emulator within a website (classpad.net) means no more installation or compatibility issues, and that we can expect more than what’s been traditionally delivered by emulation software. Come to the workshop (with the web-enabled device of your choice) and get started with the 8200 emulator on classpad.net, see some of the advantages of the new interface and, most importantly, learn about sticky output! Note: if possible, visit the Casio team at their booth prior to the workshop to set up your classpad.net log-in and get a free emulator licence.	Years 7-12
Room 4	Facilitated through Griffith University	Topic TBC -Working topic: STEM success stories from GC schools.	TBC
Room 5	Tom Sprenger, Gregory Terrace	Topic TBC	Years 11-12
Bill Simpson Closing Address 2:20-3:15			
Lecture Theatre	Greg Bland	Bill Simpson Closing Address – Title TBC	All