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

Time	Room 1 (Snr secondary)	Room 2 (Primary and Jnr Secondary)	Room 3 (Mixture)
8:15	Log in and check connections		
8:30-8:45		Welcome and housekeeping (Room 2)	
8:45 -	Introduction Keynote – How Mathematics is Shaping our Future – Dr Roland Dodd, Central Queensland University		
9:00		Hybrid streaming from Rockhampton (LINK Room 4)	
9:00-9:55		Session 1	
	Familiarisation with the QCE 2025 Mathematics	Maths in Schools: Culturally Responsive Maths	Strategies to support Indigenous Learners in
	syllabuses – Essential, General, Mathematical	Pedagogy – Sue Carter, Maths in Schools (Years P-	mathematics - Terry Bell, Matika Frid and Dr
	Methods and Specialist Mathematics– Robyn	6)	Sharon Dekkers (Secondary)
10-10:55	McNamara and Warren Richards, QCAA	Sess	ion 2
	Extended workshop (Senior Secondary)	Our learnings from early implementation of v9,	Transformative routines – elevating standards,
		and how we are building mathematical confidence	enriching processes P-6
		to set students up for success- Alexander	Rob Proffitt-White - The Learner First (P-6)
		O'Connor, Sunshine Coast Grammar (Years 7-10)	
11-12pm		Break	
12-12:55		Session 3	
	Statistical software for data investigations	Developing quality assessment: Creating	Transformative routines – elevating standards,
	Assoc Professor Michael Bulmer, UQ (Senior	questions using degree of difficulty Prep–Year 6-	enriching processes 7-10
	Secondary)	Libby Foley, QCAA (Years P-6)	Rob Proffitt-White – The Learner First (7-10)
1-1:55		Session 4	
	Teacher Supporting Teachers - Narelle Morris	Developing quality assessment: Creating	Supporting teachers teaching mathematics out-of-
	(Senior Secondary)	questions using degree of difficulty Years 7–10 -	field: Initial outcomes from an innovative
		Libby Foley, QCAA (Years 7-10)	microcredential approach. – Dr Lewes Paddell, SCU
			(Years 7-12)
2-2:30		Break	
2:30-3:25		Session 5	
	Maths in Schools: Culturally Responsive Maths	Numberland- An Introduction	Justification of aspects of Mathematical Modelling
	Pedagogy – Sue Carter, Maths in Schools (Years 7-	Mark Hansen, Deputy Principal, Sandy Strait State	Dr Tim Lehmann - QUT
	9)	School (Recorded with live discussion)	
3:30-3:45		Closing and thanks (Room 2)	

## Virtual Program Presentation Abstracts

Presentation	Presenter Name, organisation and Bio	Prestation Title and Abstract	Session
Time and Room			Audience
	Introduction Keynote – How Mathematics is Shaping our Future – Dr Roland Dodd, Central Queensland University In this keynote presentation, we will explore the profound impact of mathematics on shaping our future. Mathematics is not just a theoretical discipline but a driving force behind many of the most significant advancements in technology and science. We will delve into cutting-edge applications that showcase how mathematical principles and innovations are revolutionizing various fields.		All
		Session 1: 9-9:55am	
Room 1 9-10:55am Extended workshop	Warren Richards and Robyn McNamara – Queensland Curriculum and Assessment Authority (QCAA)	<ul> <li>Familiarisation with the QCE 2025 Mathematics syllabuses – Essential, General, Mathematical Methods and Specialist Mathematics</li> <li>These two presentations will focus on key elements of the revisions to the QCE Senior Mathematics syllabuses, including: <ul> <li>inclusion of formulas within the subject matter</li> <li>rearrangement of subject matter</li> <li>clarification 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> </li> <li>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.</li> </ul> <li>AITSL standards <ul> <li>Know the content and how to teach it</li> <li>Plan for and implement effective teaching and learning</li> <li>Assess, provide feedback and report on student learning</li> </ul> </li>	Years 11- 12
Room 2	Sue Carter, Maths in Schools	<ul> <li>6. Engage in professional learning</li> <li>Maths in Schools: Culturally Responsive Maths Pedagogy</li> <li>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.</li> </ul>	Years P-6
Room 3	Terry Bell, Curtin University, Matika Frid, Pre-service teacher, CQU and	Strategies to support Indigenous Learners in mathematics	All

	Dr Sharon Dekkers, Rockhampton SHS	<ul> <li>Engaging indigenous learners in mathematics, across all sectors of education, is vital to provide for intentional learning. To facilitate this process, it is important to understand the characteristics of indigenous learners and their preferred learning styles.</li> <li>Understanding the ways in which indigenous students learn enables teachers to develop strategies to plan for their learning and participation. This presentation will examine this topic from three differing perspectives; these being a First Nation academic, experienced teacher and First Nation tertiary student.</li> <li>If you are joining us online, please bring along some graph/grid paper.</li> </ul>	
-		Session 2: 10-10:55am	T
Room 2	Alexander O'Connor, Sunshine Coast	Our learnings from early implementation of v9, and how we are building	Years 7-10
	Grammar	mathematical confidence to set students up for success	
		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	Rob Proffitt-White - The Learner First	<b>Transformative routines – elevating standards, enriching processes P-6</b> Whether it's Version 8.4 or Version 9, every great teacher thrives on instantly implementable whole class routines. With countless educators embracing evidence- informed practices, Rob presents the latest "at the coal face, high impact stories. Discover how, when, and where to access and implement these enriching routines, bring alignment and consistency to any whole school approach	Years P-6
		Session 3: 12-12:55pm	1
Room 1	Assoc Professor Michael Bulmer, UQ	Statistical software for data investigations The freely available R language (www.r-project.org) is a useful environment for helping students learn and apply statistical thinking. RStudio (www.rstudio.com) provides an elegant interface to working with R and also introduces some powerful extensions. In this session we will give an introduction to R and RStudio and show some examples of how they can be used in class or for PSMTs, such as with bivariate data analysis in General Maths. There will also be time to share your own tasks and discuss how R could be used in your context.	Years 10- 12
Room 2	Libby Foley, Queensland Curriculum and Assessment Authority (QCAA)	<ul> <li>Developing quality assessment: Creating questions using degree of difficulty</li> <li>Prep-Year 6</li> <li>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.</li> </ul>	Years P-6

Room 3	Rob Proffitt-White - The Learner First	<b>Transformative routines – elevating standards, enriching processes 7-10</b> Whether it's Version 8.4 or Version 9, every great teacher thrives on instantly implementable whole class routines. Teachers and HODs from multiple high schools ensure these 5-10 minute routines both align to the latest messaging (QCAA, CARF etc) and maintain their ability to promote mathematical processes, minimise reteaching and support student self assessment.	Years 7-10
		Session 4: 1-1:55pm	-
Room 1	Narelle Morris	<b>Teacher Supporting Teachers (Senior Secondary)</b> Teachers Supporting Teachers is a QAMT Initiative that offers termly webinars on topics relevant to Senior Mathematics Teachers in Queensland. In this session we will have an opportunity to de-brief the revisions of the Senior syllabus and together identify ways that we can support each other, through this initiative, for a successful transition.	Years 10- 12
Room 2	Libby Foley, Queensland Curriculum and Assessment Authority (QCAA)	Developing quality assessment: Creating questions using degree of difficulty Years 7–10 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	Supporting teachers teaching mathematics out-of-field: Initial outcomes from an innovative microcredential approach. 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 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.	Years 7-12
		Session 5: 2:30-3:25pm	
Room 1	Sue Carter, Maths in Schools	Maths in Schools: Culturally Responsive Maths Pedagogy 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	Mark Hansen, Deputy Principal, Sandy	Numberland- An Introduction	Years P-6
	Strait State School	Join us for an online pre-recorded session to learn about "Numberland"	
	Recorded with live discussion	(https://www.numberland.net/), a captivating approach to teaching mathematics to	
		young learners. Developed by German educator Dr. Gerhard Friedrich, this innovative	
		concept integrates insights from brain research and early childhood development to	
		make mathematical concepts come alive for young learners.	
		Numberland is a vibrant 'community' where the numbers 1-10 reside, each with its	
		own house, garden, and ever-changing decorations. This immersive environment	
		facilitates exploration of fundamental mathematical principles, including quantity	
		representation, subitising, partitioning, and understanding the base-ten system. The	
		accompanying rhyming picture book ("My Garden is a Square", 2022), authored by	
		QAMT presenter Mark Hansen, invites children to discover mathematical patterns in a	
		playful and imaginative way, fostering hands-on learning experiences. This session will	
		provide an introduction to Numberland and access to free materials to make a start in	
		your classroom today!	
Room 3	Dr Tim Lehmann - QUT	Justifying throughout the mathematical modelling cycle	Years 7-12
		The mathematical modelling cycle requires students to make and justify critical choices	
		throughout its phases. Justification involves constructing arguments that support these	
		mathematical choices using appropriate lines of reasoning. In this session, we will	
		examine the fundamental components of this reasoning process and explore a typology	
		of arguments that students use to justify their choices. Additionally, we will discuss how	
		teachers can employ this typology to support students in writing their justifications and	
		in assessing their reports on the mathematical modelling cycle.	