2025 Quantum Victoria STEM Conference

Inspiring Futures Through STEM

Creative approaches to STEM teaching
Engaging strategies for problem solving
Effective practices with data insights
Applications of coding/programming, robotics and 3D printing

Friday 21st November 2025
Quantum Victoria, 235 Kingsbury Drive, Macleod West

A Conference for Primary and Secondary Teachers of Science, Maths and STEM, Lab Techs, and Pre-Service Teachers

Quantum VICTORIA

DIRECTOR'S WELCOME

This year's STEM conference will showcase innovative tools and strategies to help educators design dynamic, inclusive learning environments that engage and equip them for the future. Attendees will explore practical methods for guiding students through problem solving, using data to deepen understanding, and integrating cutting-edge technologies like coding, robotics, and 3D printing.

Emphasizing hands-on learning, creativity, and effective pedagogy, the conference will highlight approaches that foster critical thinking, communication, and innovation. Through collaboration and the sharing of fresh ideas, educators will leave equipped to spark curiosity and design meaningful STEM experiences that inspire students to shape their own futures.

I look forward to seeing you at this year's conference.

Linda Arthurson
Conference Convenor and Director, Quantum Victoria

Proudly Supported by the Victorian Department of Education

VICTORIA State Government | Department of Education

The Victorian Department of Education leads the delivery of education and development services to Victorians both directly through government schools and indirectly through the regulation and funding of early childhood services and non-government schools. The Tech School Branch supports students to develop contemporary skills, knowledge, and capabilities through innovative STEM education provision. Through a network that currently includes 10 Tech Schools, 6 science and mathematics specialist centres and 2 STEM centres of excellence, we design and implement a unique model of schooling to deliver applied STEM learning students need to succeed in the 21st century world. Another 6 Tech Schools will soon be opening across Victoria.

KEYNOTE SPEAKER

Quantum VICTORIA

PLANTS FOR SPACE
ARC CENTRE OF EXCELLENCE

Prof. Mat Lewsey

La Trobe Institute of Sustainable Agriculture and Food, Department of Animal, Plant and Soil Sciences, La Trobe University
Node Leader, ARC Centre of Excellence in Plants for Space
Node Director, Australian Plant Phenomics Network
Deputy Director, La Trobe Genomics Platform

Mat is a hands-on lab biologist turned data-crunching genome scientist. His lab studies how plants perceive the world around them and interact with their environments by regulation of their genomes. They apply this work to agricultural crops including cannabis, opium poppies, barley, oats and peas. Mat's expertise in organism-scale, single-cell resolution mapping of gene expression and modelling regulatory networks has generated recent technological advances in single-cell and spatial tran-scriptomics. His research in Plants for Space includes modifying plant networks in a precise, targeted fashion to improve plant growth for indoor growing environments and synthesis medicines in plants on demand.

Mat is currently working with NASA to better understand how plants will respond to being grown on the moon's surface - both what they look like to humans, and on the molecular level.

SPONSORS

ROAD TO ZERO

FREE SCIENCE EXCURSION
Book now for 2026

Designed specifically to align with the Year 9 and 10 Science, and VCE VM, curriculum, the world-first Road to Zero Education Complex at Melbourne Museum offers students an immersive and engaging experience exploring the science behind road safety.

Students will delve into the scientific principles of motion, forces and energy, discovering how speed and reaction times impact stopping distances and crash outcomes.

Encouraging hands-on interaction with immersive displays, interactive touchscreens and virtual reality, Road to Zero helps students understand the real human impact of crash forces while reinforcing key curriculum concepts.

Teachers can access free pre- and post- visit resources to support and extend student learning.

For more information or to book your school's preferred dates, contact Museum Bookings:
Phone: 13 11 02
Email: schools@museum.vic.gov.au
Website: roadtozero.vic.gov.au

Equip your students with the tools and knowledge they need for a safe future on the roads.

TAC MELBOURNE MUSEUM ROAD TO ZERO

AIPS TALL POPPY campaign

CUBIC TECHNOLOGY

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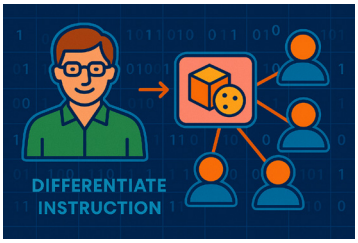
TANGIFY

Tangify: *Smarter STEM Assessment for Every Student* **https://www.tangifylearning.com**

Tangify transforms assessment by shifting the focus from subjects to students.



Rather than tracking maths, science, and tech in isolation, Tangify connects them, delivering a single, holistic view of learning growth across disciplines. Teachers use the tasks they already know and trust. Whether imported or created in-platform, each task is adapted by AI to suit every student's skill level, interests, and learning preferences.

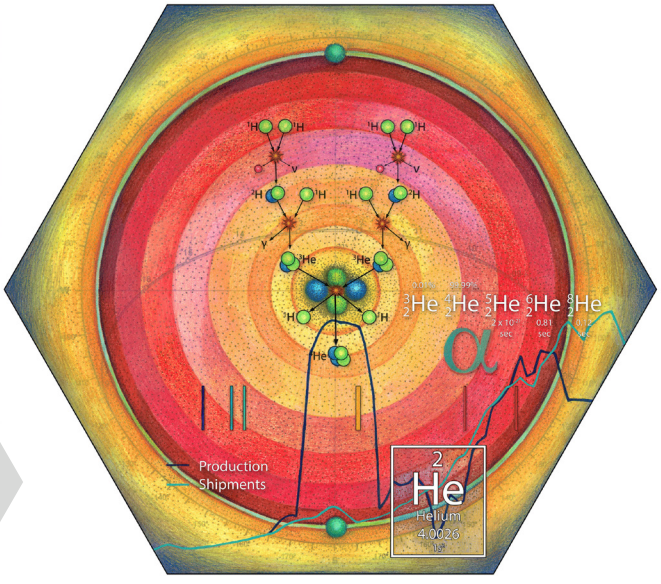
Differentiated Assessment. Real-Time Evidence. No Extra Work.

Built by educators with over 30 years of STEM teaching experience, Tangify structures every task around real-world problem solving and inquiry. It captures evidence from multiple sources - student work, teacher observations, and inferred learning patterns - and provides rich, real-time feedforward to guide next steps.

Why it matters:

- Less marking. More teaching.
- Personalised challenge for every learner.
- Actionable data for consistent, school-wide improvement.

Tangify brings true differentiated assessment to STEM classrooms and puts the whole learner at the centre.



CONFERENCE PROGRAM

Quantum VICTORIA

8:00 am - 8:45 am	**Registration & Exhibitors** - Gallery
8:45 am - 9:00 am	**Welcome** - Linda Arthurson, Quantum Victoria Director
9:00 am - 9:55 am	**Keynote** - Prof. Mat Lewsey, Plants For Space Advancing Plants for Space and Sustainable Farming on Earth: From DNA to the Moon
9:55 am - 10:30 am	**Morning Tea & Exhibitors** - Rooms
10:35 am - 11:35 am **Session 1 Workshops**	**1A Minecraft - From Getting Started to Easily Sharing Student Work** Ingrid Noack, Barrawang Primary School (Primary and Secondary 2-8) **1B The Power of Play to Nurture STEAM Learning in Primary School** Libby Moore, Moore Educational (Primary F-6) **1C Student Lead Hands-on Workshop** Mark Dixon & students, Dallas Brooks Community Primary School (Primary 5-6) **1D Grassland Guardians: Teaching Science Through the Lens of Native Grasslands** Julie White, Environmental Evolution & Heather-May Buzza, Wareen Primary School School (Pri & Sec F-10) **1E 3D Modelling with Tinkercad & Fusion 360** Anthony Simcox & Hanifa Shaqiri, Quantum Victoria (Primary and Seconday 5-10) **1F Beyond the Worksheet: Teaching with Digital Interactive Notebooks** Elijah Bajao, Monash College (Primary and Secondary 5-12)
11:40 am - 12:40 pm **Session 2 Workshops**	**2A Beyond the Silo: Tracking Student Growth in STEM** Jackson Clayton & Andrew Cameron, Tangify (Primary and Secondary 3-10) **2B Creating Constellations: A Cross-Cultural STEM Journey Through Space** Natasha Taylor & Amy Veerman, Clifton Hill Primary School (Primary 5-6) **2C Plants for Space: Growing a Sustainable Future in Space and on Earth** Frazer Thorpe & Douglas Bair, Plants for Space ARC Centre of Excellence, La Trobe University (Pri & Sec 3-11) **2D HIT 5 – Collaboration!** Jaclyn Curnow, Viewbank College (Primary and Secondary 5-10) **2E Smart, Hands-On Science: Save Money with 3D Printing in Science** Amanda Brick, Modern Teaching Aids (Primary and Secondary 4-12) **2F youcubed - Inspiring Mathematical Learners** Steve Eichler, Earth Ed; Brett Domaschenz & Jonathan Dorning, Mount Clear College (Pri & Sec F-9)
12:40 pm - 1:25 pm	**Lunch & Exhibitors** - Rooms
1:30 pm - 2:30 pm **Session 3 Workshops**	**3A Developing A Coordinated Whole School Approach to AI** Stuart Fankhauser, Nossal High School (Primary and Secondary 5-12) **3B From Idea to Impact: Empowering Students to Invent with Purpose** Nicole Veis, Lower Plenty Primary School (Primary and Secondary F-12) **3C Integrating the Science and Technologies Curriculum into the Primary STEM classroom** Greg Hellard & Ai Lin Ho, Huntingtower School (Primary 3-6) **3D The Third Dimension: Unlocking 3D Thinking with Laser Cutting** Domenic Di Giorgio & Kim Gould, Darkly Labs (Primary and Secondary 6-12) **3E Rulers of the Universe - How did they do it?** Paul Fitz-Gerald, Mansfield Secondary College (Secondary 9-10) **3F Sparking Science Success: Simple Strategies for Primary School Practicals** Annaliese Winterson & Julia Cherubin, Quantum Victoria (Primary F-6)
2:35 pm - 3:35 pm **Session 4 Workshops**	**4A Educational Escape Rooms to Captivate Your Learners** Robert Ross, La Trobe University (Primary and Secondary 5-11) **4B Python Coding for the Primary School** Quyen Thai, Christ the King Catholic Primary School & Toan Huynh, Code4Schools (Primary and Secondary 5-8) **4C VCE Astronomy at VSSEC – A Practical Approach** Emma Barnett & Dianne Martin, Victorian Space Science Education Centre (Secondary 10-11) **4D Indigenous STEM and Vic Curriculum 2.0** Jakin Stasce & Annaliese Winterson, Quantum Victoria (Primary and Secondary F-10) **4E Building Creativity, Community and Capacity through Engagement-First STEAM** Paul Taylor & Kimberley Taylor, Rolling Hills Primary School (Primary F-6) **4F Critical Thinking is Critical! Using "Flippity" to Develop Skills** Jaclyn Curnow, Viewbank College (Primary and Secondary 4-12)

EXHIBITORS

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Darkly Labs®

Education Services Australia

ecolinc

ep Education Perfect

HAINES EDUCATIONAL

MAKERS EMPIRE

Moore Educational
- supplier of serious fun -

mta
modern teaching aids

ssa
Science Supply Australia
Chemistry with Clients

STEM ZONE

PRESENTERS

Douglas Bair, Plants for Space ARC Centre of Excellence - La Trobe University
Elijah Bajao, Monash College
Emma Barnett, Victorian Space Science Education Centre
Amanda Brick, Modern Teaching Aids
Heather-May Buzza, Wareen Primary School
Andrew Cameron, Tangify
Julia Cherubin, Quantum Victoria
Jackson Clayton, Tangify
Jaclyn Curnow, Viewbank College
Domenic Di Giorgio, Darkly Labs
Mark Dixon, Dallas Brooks Community Primary School
Brett Domaschenz, Mount Clear College
Jonathan Dorning, Mount Clear College
Steve Eichler, Earth Ed
Stuart Fankhauser, Nossal High School
Paul Fitz-Gerald, Mansfield Secondary College
Kim Gould, Darkly Labs
Greg Hellard, Huntingtower School
Toan Huynh, Code4Schools
Ai Lin Ho, Huntingtower School
Dianne Martin, Victorian Space Science Education Centre
Libby Moore, Moore Educational
Ingrid Noack, Barrawang Primary School
Robert Ross, La Trobe University
Hanifa Shaqiri, Quantum Victoria
Anthony Simcox, Quantum Victoria
Jakin Stasce, Quantum Victoria
Paul Taylor, Rolling Hills Primary School
Kimberley Taylor, Rolling Hills Primary School
Natasha Taylor, Clifton Hill Primary School
Quyen Thai, Christ the King Catholic Primary School
Frazer Thorpe, Plants for Space ARC Centre of Excellence - La Trobe University
Amy Veerman, Clifton Hill Primary School
Nicole Veis, Lower Plenty Primary School
Julie White, Environmental Evolution, Victorian National Parks Association
Annaliese Winterson, Quantum Victoria

Session 1 Workshops

1A Minecraft - From Getting Started to Easily Sharing Student Work

Ingrid Noack, Barrawang Primary School (Primary and Secondary 2-8)

This presentation starts with what Minecraft Education is and confidence-building ways to get started with it as a teacher. This includes a practical way to use the in-game classroom settings and tips in developing student expectations that work. The focus then moves to what kinds of activities students across foundation to year 6 can complete. These include sharing student work samples and directing participants to additional resources. Finally, there are different examples of how to set up your Learning Management Systems to collate student work using Microsoft Teams or Google Slides. There are 3 main methods shared; sharing work via screenshots collated in whole class PowerPoints or Google slides. Teaching students how to complete a Minecraft screen recording, including editing and uploading to PowerPoint or Google slides. Using structure blocks to share student work in 3D. This presentation will help Minecraft curious teachers get started and also give those with experience ideas on how to share student work more effectively.

1B The Power of Play to Nurture STEAM Learning in Primary School

Libby Moore, Moore Educational (Primary F-6)

Explore the ACARA aligned resources and lessons that instantly engage Primary students in STEAM to spark curiosity and inquiry. Explore LEGO® Education Science and LEGO® Education SPIKE™ Essential to see how you can support the students of today to become the builders of a better world tomorrow by allowing them to create, code, innovate and share insights in Science, Technology, Engineering and Maths. Take with you a sample set to continue the playful learning.

1C Student Lead Hands-on Workshop

Mark Dixon & students, Dallas Brooks Community Primary School (Primary 5-6)

Students lead hands-on activities using microbic Sphero RVR and Dashbots. Hands on activities will include Sphero RVR , piano dashbot, microbit and Maqueen. Participants will rotate through 4 activities planned and lead by grade 5/6 students. Our student leaders presented these activities at the 2025 Edutech Conference in June. Copy and paste the link to our work in Sydney https://youtu.be/H1vRWHn-WEk

1D Grassland Guardians: Teaching Science Through the Lens of Native Grasslands

Julie White, Environmental Evolution & Heather-May Buzza, Wareen Primary School School (Pri & Sec F-10)

Explore how to teach science concepts through the unique and often-overlooked lens of Australia's native grasslands. Grounded in the Victorian Curriculum 2.0, Grassland Guardians is a hands-on, curriculum-aligned workshop that supports primary educators to deliver engaging, inquiry-based science learning. Participants will discover creative strategies and classroom-ready activities that connect students with real-world ecological challenges while fostering environmental awareness and action. Learn about native grassland species, their adaptations, threats to these ecosystems, and how citizen science can extend student learning beyond the classroom. This workshop integrates biological sciences with critical and creative thinking, sustainability, and ethical capabilities. Walk away with unique resources, renewed inspiration, and the confidence to grow the next generation of nature-connected learners.

1E 3D Modelling with Tinkercad & Fusion 360

Anthony Simcox & Hanifa Shaqiri, Quantum Victoria (Primary and Seconday 5-10)

Join us for a hands-on 3D modelling workshop where you'll choose between Tinkercad and Fusion 360 to develop skills that will enhance your teaching toolkit. Whether you're a beginner or looking to deepen your expertise, you'll learn the basics and useful intermediate techniques to support your students in creative projects. Additionally, we'll demo how to slice and prepare your models for 3D printing, ensuring you leave with practical knowledge to integrate into your curriculum. This session is perfect for educators eager to inspire students through innovative and hands-on learning experiences.

1F Beyond the Worksheet: Teaching with Digital Interactive Notebooks

Elijah Bajao, Monash College (Primary and Secondary 5-12)

Digital interactive notebooks offer a powerful, flexible approach to supporting student learning across a wide range of educational contexts. In this hands-on, demonstration-based session, participants will explore how tools such as Google Slides, Canva, and generative AI can be harnessed to design scaffolded and visually engaging learning experiences. These digital notebooks provide opportunities to boost academic literacy, build writing confidence, and foster deeper student engagement through structured yet creative formats. The session will guide educators through practical strategies for integrating these tools into their own teaching, with an emphasis on adaptability and student-centred design. Participants will also engage in reflective discussion and collaboration to consider how these approaches can be tailored to their specific settings. The session concludes with a practical toolkit of templates, resources, and implementation ideas, empowering educators to confidently adopt digital interactive notebooks in their classrooms or learning environments.

Session 2 Workshops

2A

Beyond the Silo: Tracking Student Growth in STEM

Jackson Clayton & Andrew Cameron, Tangify (Primary and Secondary 3-10)

While STEM is often promoted as an integrated approach, the reality in schools is more fragmented; subjects are timetabled separately, students move between teachers, and assessment data rarely travels across classes. This workshop explores how we can break through these silos to build a clearer, more connected picture of student growth. Through an interactive demonstration and group task, participants will experience the challenges of differentiation firsthand and then work through strategies for designing problem-based STEM tasks that develop creativity, problem solving, and critical thinking across domains. We'll explore how to track cross-disciplinary progress and generate meaningful, manageable evidence of learning (without increasing workload!) The session includes adaptable task design frameworks and a look at Tangify, a new tool that streamlines personalised assessment in integrated learning environments. Leave with practical ideas you can implement straight away - whether you teach one STEM subject or coordinate many.

2B

Creating Constellations: A Cross-Cultural STEM Journey Through Space

Natasha Taylor & Amy Veerman, Clifton Hill Primary School (Primary 5-6)

This presentation highlights a dynamic STEAM unit that combines space science, digital technologies, and Aboriginal and Torres Strait Islander cultural astronomy. Students investigated the solar system—examining planetary orbits, sizes, and distances—before exploring how Indigenous Australians have long used celestial observations for timekeeping and seasonal knowledge. Using Makers Empire software, students then designed and 3D printed models to creatively demonstrate their learning. This interdisciplinary approach promoted hands-on engagement, creative expression, and a deeper, respectful understanding of First Nations perspectives alongside scientific knowledge.

2C

Plants for Space: Growing a Sustainable Future in Space and on Earth

Frazer Thorpe & Douglas Bair, Plants for Space ARC Centre of Excellence, La Trobe University (Pri & Sec 3-11)

The ARC Centre of Excellence for Plants for Space pioneers innovative plant design for space and Earth sustainability. Our mission is to create plant forms for complete nutrition, zero-waste crops, and on-demand bioresource production to support off-Earth habitation. We offer research and curriculum aligned education materials are hands-on experiences for teachers and students. Join us in this workshop to experience the cutting-edge DNA tools and genetic engineering approaches. You can engage in crafting plants designed for space applications—capable of producing medicines, plastics, and nutrients on demand, and engineered for trait modification, shape adaptation, and robotic interaction—bringing frontier science into classrooms and inspiring future space-ready innovators.

2D

HIT 5 – Collaboration!

Jaclyn Curnow, Viewbank College (Primary and Secondary 5-10)

Learning Stations and Jigsaw Groups are effective ways for learners to work together. These group learning activities are specifically designed so that student collaboration is necessary to accomplish a task. When learning stations or carousel learning is happening, the teacher can be one of the stations and use this time to address misconceptions or extend knowledge. The students would be grouped according to their instructional level. For Jigsaw groups, students become experts in a field and then share their knowledge with member of other groups. Students are accountable to each other, as they share information. In the first round, they are actively engaged in note taking and discussions as in other rounds they take turns to report back to the other groups. For Science it could be students exploring animal classifications, for Maths it could be students exploring measurement. Time keeping and diagrams of movement help with collaborative leaning.

2E

2E Smart, Hands-On Science: Save Money with 3D Printing in Science

Amanda Brick, Modern Teaching Aids (Primary and Secondary 4-12)

Explore how 3D printing can save your science lab time and money while supporting the new Victorian Curriculum 2.0. This hands-on session is perfect for teachers and lab techs ready to discover cost-effective, practical learning tools.

- Watch a 3D printer in action from start to finish
- Explore 3D printed science resources and clever lab storage hacks
- Learn to find free 3D printing templates online
- No experience needed – it's easier than you think!
- Print your own custom-fit resources to save on costs

A fun, practical introduction that will get you thinking about what's possible—and how much you could save!

2F

youcubed - Inspiring Mathematical Learners

Steve Eichler, Earth Ed; Brett Domaschenz & Jonathan Dorning, Mount Clear College (Pri & Sec F-9)

Creating cultures of thinking through engaging and connected mathematics that foster limitless minds. An introduction to the key concepts and research behind Jo Boaler's youcubed. In this session we will get 'hands on' to explore approaches to creating positive attitudes towards maths, creating engaged, connected communities of learners and how youcubed resources, lessons and activities support the implementation of the new mathematics curriculum 2.0.

Session 3 Workshops

3A

Developing A Coordinated Whole School Approach to AI

Stuart Fankhauser, Nossal High School (Primary and Secondary 5-12)

Currently is has been left to individual schools to develop and implement a proactive, coordinated strategy to AI. This presentation outlines the whole-school approach developed at Nossal High School that aims to address the issues around AI and pedagogy, assessment, student wellbeing, and administration. This approach has been grounded in staff collaboration, informed by student voice, and important ethical imperatives, and the model utilizes a school-wide 'traffic light system' for AI use, longitudinal student surveys, and differentiated professional learning. The approach attempts to align with the school's curriculum, wellbeing support, and technological infrastructure objectives, ensuring AI tools enhance rather than undermine learning. By embedding metacognition and intentional learning strategies, students are taught not just how to use AI, but when and why. Attendees will leave with a practical framework and examples for implementing thoughtful, future-focused AI policies and pedagogy across a school setting.

3B

From Idea to Impact: Empowering Students to Invent with Purpose

Nicole Veis, Lower Plenty Primary School (Primary and Secondary F-12)

This workshop explores a hands-on STEM unit where students design and prototype their own inventions to solve real-world problems. Through a design thinking lens, students research, plan, and create product concepts with optional extensions including coding or 3D modelling. The unit fosters creativity, critical thinking, and collaboration, and is highly adaptable across year levels. Participants will walk away with project ideas, student examples, and ready-to-use planning tools that make STEM meaningful, inclusive, and fun.

3C

Integrating the Science and Technologies Curriculum into the Primary STEM classroom

Greg Hellard & Ai Lin Ho, Huntingtower School (Primary 3-6)

8 STEM units that combine & cover the Science and Design & Digital Technologies Curriculum by engaging students in project based learning.

3D

The Third Dimension: Unlocking 3D Thinking with Laser Cutting

Domenic Di Giorgio & Kim Gould, Darkly Labs (Primary and Secondary 6-12)

Unlock the creative potential of laser cutting in your classroom by exploring how flat designs can transform into engaging 3D structures. This session introduces educators to the fundamentals of designing 3D shapes using laser cutters, including how to create interlocking parts, and use design software to model, test, and refine ideas. We'll cover the basics of creating slot-fit joints, kerf adjustments, and simple design techniques that bring concepts off the screen and into students' hands. Whether you're new to digital fabrication or looking to deepen your understanding, this session offers practical tips, examples, and classroom-ready insights that connect STEAM principles with hands-on making. You'll leave with the confidence to guide students through the design process—from sketch to structure—while fostering creativity, problem-solving, and spatial thinking skills. Perfect for beginners with a taste of intermediate techniques to grow into.

3E

Rulers of the Universe - How did they do it?

Paul Fitz-Gerald, Mansfield Secondary College (Secondary 9-10)

In this workshop we will be looking at one part of a semester long middle years elective unit that I have developed titled 'Rulers of the Universe'. In this unit students learn how we measure the very small to the very large. Today's session will focus on the question "Where does space begin and the Earth's atmosphere end?" You may be surprised to learn that this question was first thought about and answered in the 11th Century! Intrigued? If so, come along and find out as we work through it together.

3F

Sparking Science Success: Simple Strategies for Primary School Practicals

Annaliese Winterson & Julia Cherubin, Quantum Victoria (Primary F-6)

Sparking Science Success is a practical workshop designed to empower primary educators with the tools and techniques to bring science to life in the classroom. Through a series of hands-on experiments and practical activities, you'll discover how to engage young minds, spark curiosity, and foster a love for science among your students. This workshop will provide you with easy-toimplement strategies, creative lesson plans, and resourceful tips to make science fun, accessible, and impactful. Whether you're looking to refresh your approach or introduce new ideas, you'll leave with a toolkit of activities that align with curriculum standards and inspire your students to explore the wonders of the world around them.

Session 4 Workshops

4A

Educational Escape Rooms to Captivate Your Learners

Robert Ross, La Trobe University (Primary and Secondary 5-11)

Educational Escape Rooms are highly engaging, team-based learning experiences where students work together to solve problems within a time-critical narrative. Educational escape rooms are a new frontier within game-based learning and are widely applicable across age groups and discipline domains. In this seminar we will map out what educational escape rooms are, how they can be used and a series of STEM based example puzzles for participants to stretch their minds on. We will also cover best practice for puzzle design, how to use the electronic decoder box, tips for making escape rooms run smoothly and the new frontiers we are looking towards for further research in educational escape rooms. Find out how you can integrate the next generation of educational escape rooms into your classroom and re-engage your students.

4B

Python Coding for the Primary School

Quyen Thai, Christ the King Catholic Primary School & Toan Huynh, Code4Schools (Primary and Secondary 5-8)

Integrating Python into Year 5/6 STEM Projects. Educators will explore how Python can be explicitly taught and applied in a Year 5/6 classroom through engaging STEM projects. The session will begin by outlining strategies for introducing core coding concepts—such as variables, loops, and conditionals—through direct instruction. It will then demonstrate how students can apply these skills in meaningful, real-world contexts. Two key projects will be showcased: a digital Well-Being Hub, where students use Python to design tools that support mindfulness and emotional regulation, and a Choose-Your-Own-Adventure game, which blends storytelling and coding within a school-based setting. These examples will illustrate how coding can support cross-curricular learning, foster creativity, and build problem-solving and collaboration skills. Participants will leave with practical ideas and inspiration to integrate coding into their classrooms, empowering students to become confident, capable digital creators from an early age.

4C

VCE Astronomy at VSSEC – A Practical Approach

Emma Barnett & Dianne Martin, Victorian Space Science Education Centre (Secondary 10-11)

Explore a hands-on, data driven approach to astronomy in VCE with VSSEC's new Year 11 program. This workshop will allow you to take the place of a student, and you will:

- Operate a real, dedicated radio telescope to image a celestial object
- Use spectrometers to analyse the sun
- Discuss classroom activities for consolidation of learning alongside VSSEC's program

This new program provides a very practical approach to Physics Unit 2, Area of Study 2, Option 2.13: How do astrophysicists investigate stars and black holes?

4D

Indigenous STEM and Vic Curriculum 2.0

Jakin Stasce & Annaliese Winterson, Quantum Victoria (Primary and Secondary F-10)

In this session we explain where and how to incorporate indigenous STEM into your classroom. We focus on areas of the curriculum where Indigenous innovation can be genuinely showcased and give specific examples. Delegates will have the opportunity to see our Indigenous STEM Minecraft Mod including how we integrated story and selected scientific practices into the program.

4E

Building Creativity, Community and Capacity through Engagement-First STEAM

Paul Taylor & Kimberley Taylor, Rolling Hills Primary School (Primary F-6)

When you find a good hook isn't enough, it's time to turn the learning into the hook.
Join us for an interactive expedition through our practice (and practise) using engagement as a catalyst for success across our STEAM curriculum. At Foundation we start developing Science Inquiry Skills and Critical and Creative Thinking capabilities. Through their journey, we support all students to master their own scientific investigations, and design and complete their own digital/design technology projects. Have a go at turning lazy into crazy, asking us impossible questions, or just fill your pockets with ideas for your next adventure!

4F

Critical Thinking is Critical! Using "Flippity" to Develop Skills

Jaclyn Curnow, Viewbank College (Primary and Secondary 4-12)

Flippity is a powerful way to get more out of Google Sheets. This free program doesn't require teacher or student sign up. Flippity supports differentiation as teachers can design activities that align with their students' needs. Flippity's templates simply require the teacher or students to make template edits to personalise the experience. This customised interface supports primary and secondary students. Students of all ages enjoy working collaboratively to analyse and solve puzzles which are created by their peers. Content creators are supported by instructions, making the process easy for anyone. This workshop explores "Manipulatives" to sort and arrange concepts by moving digital cards and "Group Game" similar to the New York Times Connections. Critical thinking skills are demonstrated in the creation and solving of the tasks. Create activities in this workshop to post on your LMS for use in the classroom the next day.

Conference Venue

Quantum Victoria
235 Kingsbury Drive, Macleod West
VIC 3085
Google Maps

Contact Details
Phone: 03 9223 1460
Email: admin@quantumvictoria.vic.edu.au
ABN 65 029 766 137

Parking

Free parking onsite; entry to Quantum Victoria can only be accessed via Kingsbury Drive eastbound. There is a left turning lane into the Charles La Trobe P-12 College & Quantum Victoria car park.

Please park in non-designated bays.

There is also plenty of free street parking to the east and south on side streets off Waiora Rd and Ruthven St within a five-minute walking distance.

Registration

Register here or scan the QR code.

Conference Cost

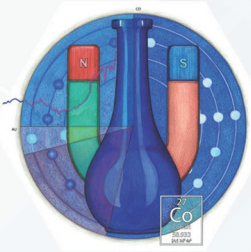
Primary/Secondary Teachers	$270 for the first teacher
Additional Teacher	$145
Lab Technicians	$145
Pre-Service Teachers	$95

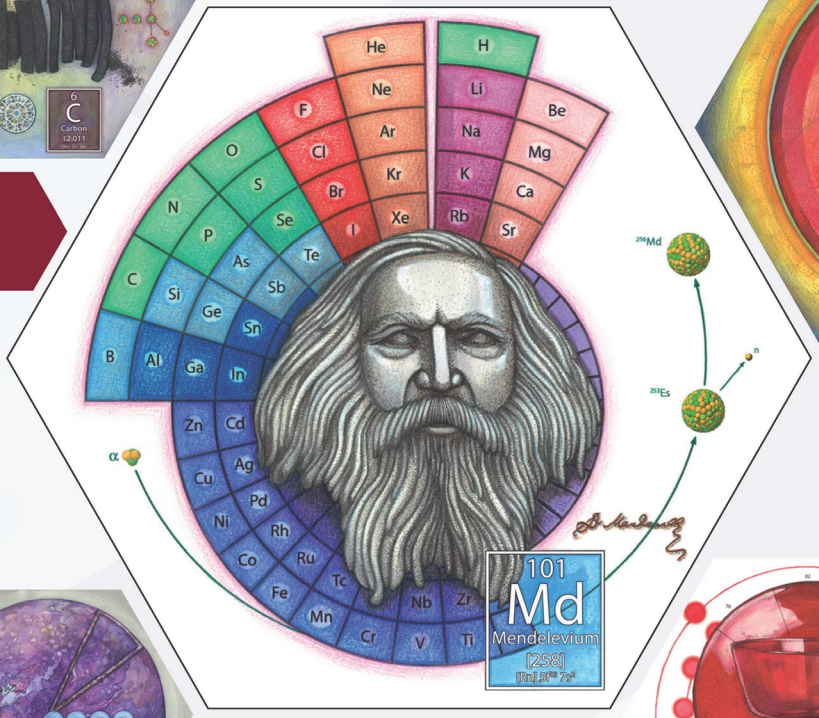
All prices are inclusive of GST. Morning tea, lunch and satchel are included in the cost of registration.

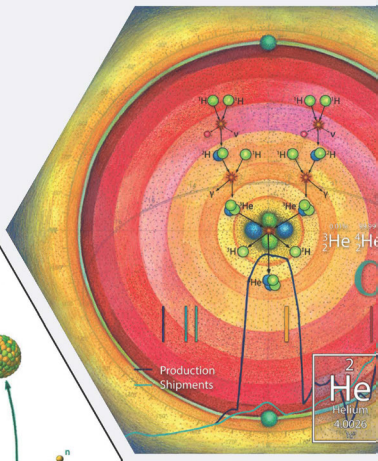
Refund and Attendance

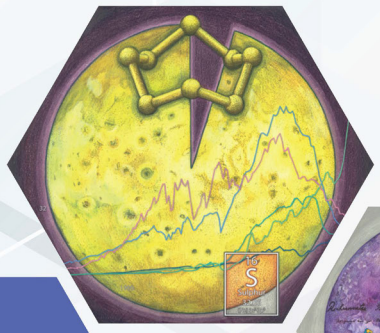
Notice of cancellation is required by Friday 7th November 2025 for a full refund. Cancellation after this date will incur the full attendance cost. Registrations will be accepted up until Friday 14th November 2025.

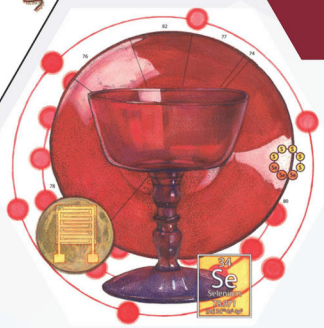
To secure your place, please follow the link to register or scan the QR code. Attendance at the QV STEM Conference without a confirmed place will result in you being turned away.

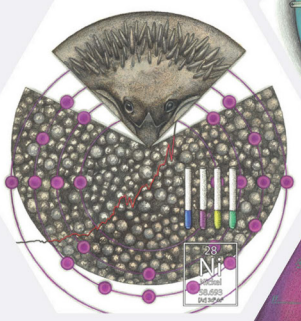


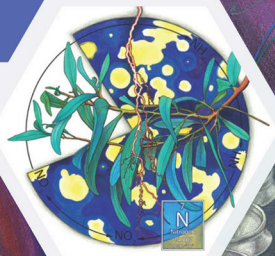












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