

It Takes a Spark!

EDU Conference



*Listed program is
subject to change

Thursday, 9 May 2019 | Toowoomba

WORKSHOP PROGRAM

Outstanding Keynote Speakers



STEPH PIPER

Tinker, Maker, Printer, Sparker!

Steph Piper has a background in biofabrication and 3D printing for medical grade implants. She's currently the Patron of the Brisbane Hackerspace and the Community Engagement Coordinator at USQ, looking after the Library Makerspace. She's recently won the Asia Pacific Startup weekend finals with a new startup called Spark Girlz.



DR CAROLYN BROWN

Astrophysicist, University of Southern Queensland

Dr Carolyn Brown grew up locally and is an Astrophysicist and a Physics Lecturer at the University of Southern Queensland (USQ) in Toowoomba. As well as passing her knowledge onto her undergraduate students in both Astronomy and Physics, Carolyn is involved in research projects that work with NASA, and investigates the nature of stars other than our Sun, and their effects on the habitability of the planets around them.

MORE INFORMATION: spark-educonferences.com.au/it-takes-a-spark-toowoomba/



**STEAM
CONFERENCE
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ST SAVIOUR'S COLLEGE

Contact

Rachel Manneke-Jones

Registration & Booking Spark EDU
Conferences/Intuyu Consulting

P | 0411 270 277

E | rachel@spark-educonferences.com.au

Adrian Bertolini

Conference Coordinator Spark EDU
Conferences/Intuyu Consulting

P | 0413 036 382

E | adrian@spark-educonferences.com.au

TEACHER MINI-MASTER CLASSES

50 min parallel sessions held across 2 rotations

*Listed program is subject to change

3D Printing and Entrepreneurship

Wojciech Wawrzyniak, Konica Minolta



In this session we will outline the impact and advantages of 3D printing technology in the process of product development and entrepreneurship (and how one drives the other). The session will also explore new and future opportunities arising from these modern technologies and why it is important to teach them as early as possible. Come and see what is possible with the latest range of technologies.

School / teacher stages: Beginning, Next Step
Suitable for Secondary teacher

Learning Algebra through Gamification

Yuji Takahashi, Math Mate



Math Mate

Numerous studies have shown that student performance in Maths increases when engagement increases. Math Mate develops gamified learning apps for high school students that encourage play, exploration and interactivity when learning algebra.

In this showcase we will:

- describe and demo the interactive technology we have developed,
- outline the key design choices we have made to improve student engagement,
- report our results and learnings from working with Queensland schools in 2018, and
- let participants use our apps to solve maths problems themselves

School / teacher stages: Beginning, Next Step, Extending
Suitable for Secondary teacher

Creator Kids for Teachers

Brad Howard, Practical PD



The Creator Kids program is a 10 STEP Entrepreneurial model which is delivered to students from Years 5 -12 in any education environment and at any skill level over 2 full days as an incursion. The program provides a process for students to discover their passions, establish problems, create solutions, turn solutions into products and businesses that incorporate digital technology through computational, design and system thinking, understand financial implications and present their learning to an audience.

In this session we will take you through the pedagogy behind the program, understanding of STEAM integration within the program, connections to the Digital Technology Curriculum and a look at the process the students work through.

School / teacher stages: Next Step, Extending
Suitable for Primary & Secondary teacher

Future City Makers - 3D Design, Virtual Reality & Augmented Reality

Damien Aldridge and Natalie Anderson, STEM Punks



In this interactive and hands-on workshop we explore how 3D Design, Virtual, and Augmented Reality can be used for innovative and creative problem solving.

School / teacher stages: Beginning, Next Step
Suitable for Primary and Secondary

Experimentary

Dr Robert Bell, Experimentary



Explore a new science education resource that is all about inquiry based learning. Designed by Dr Robert Bell (host of kid's science TV show Scope) there will be plenty of learning by doing and a bit of fun too!

School / teacher stages: Beginning, Next Step
Suitable for Primary teacher



Launching Students into the 21st Century

Gayle Stone, Rangeville State School



This workshop showcases the work that is being done at Rangeville State School with Prep students to develop a strong foundation for a scaffolded Digital Technologies program. The workshop focuses on using sequential thinking as a basis for computational thinking. There will be activities presented that shows the use of sequential thinking in lessons.

School / teacher stages: Beginning, Next Step
Suitable for Primary teacher

DIGI-DESIGN MINI WORKSHOPS

50 min parallel sessions held across 2 rotations
Student (Year 4 to 10 girls) and/or Teacher

*Listed program is subject to change

3D Printing Futures

Stephanie Piper, University of Southern Queensland



This session will walk you through what all the 3D printing hype is about and the potential of 3D Printing. Steph will reveal the best places to find 3D models and explore different 3D scanning techniques. You'll hear about projects in bio-fabrication, furniture, textiles and may even get a chance to use TinkerCad to create a 3D item.

Suitable for Primary and Secondary

Virtual Reality (VR) in Learning

Steve Iuliano, The School Locker



Schools around Australia have been working on integrating VR into as many learning areas as possible. Students from HASS, Science, Math & English can design and teleport themselves into their own historical creations. This workshop will not only discuss how to create and modify 3D models, but how to add annotations and anchor points to models that are helpful when presenting and demonstrating important aspects of your design. We will also show how to add in 3D stereoscopic sound such as student narrative, sound effects, background music, etc, that changes as you walk around the model. This is an incredibly immersive experience and very engaging for students and teachers. Best of all, all the software used is FREE to access. This is not your typical VR demo workshop!

Suitable for Primary, Secondary and Specialist

iCreate - Invention Convention

Mia Pinnington & Students, Coomera Rivers State School

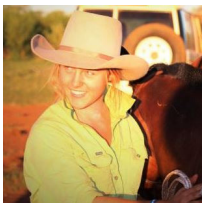


This session, co-led with students from Coomera Rivers SS, will showcase some great STEAM units/design challenges you can run in your school. Attendees will also have the opportunity to work their way through one of two challenges using Little Bits and Innobits to show their inventiveness!

Suitable for Primary

Using social media to generate interest and make a difference to issues you care about

Emma Moss, Life On a Station



Emma Moss didn't set out to be a role model for young women in agriculture, or a social media influencer. It happened by accident after she bought a second-hand camera. The former CEO of the Kimberley Pilbara Cattleman's Association Catherine Marriot says Emma has been "really changing perceptions and getting young girls to think about the opportunities not only to come up to a station for 12 months' experience, but also develop a career in our region." In this session Emma will share about her journey and draw out some social media approaches girls and their teachers can use to generate interest & make a difference to issues that matter to you.

Suitable for Secondary

Coding & electronics with Micro:bit

Pathik Shah, Pakronics

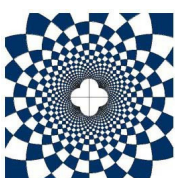


The Micro:bit is most popular with teachers who are starting a technology class as it works straight out of the box. It offers multiple programming languages like Graphical, JavaScript and Python and is very easy to learn and teach. This workshop will take you on a crash course to get to know Micro:bit & coding. Participants will go through a range of hands on exercises in Graphical programming.

Suitable for Primary and Specialist

Patterns and Mathematics in Art

Alwyn Powell, University of Southern Queensland



Participants will engage in making number patterns. The hands-on workshop includes making links to art with subitising, collage, squares and magic squares. The participants will leave with some of their self-generated number patterns and magic squares.

Suitable for Primary

DIGI-DESIGN MINI WORKSHOPS

50 min parallel sessions held across 2 rotations
Student (Year 4 to 10 girls) and/or Teacher

* Listed program is subject to change

Robot Sandwich Maker

Peter Horton and Nicholas Strickland, St Mary's College Toowoomba

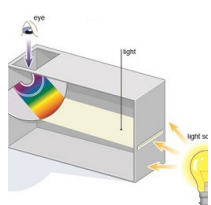


This workshop involves introducing students to the ideas and skills involved in coding and programming, which are ultimately utilised in the real world using various programming languages. Students will form groups of 4 to 6 and be asked to provide instructions to program a robot to make a simple jam sandwich. Students will document their code with the ability to test their human robot and refine their program to develop an effective code. This simple but highly effective and engaging activity will provide students with the essential knowledge and understanding in the area of coding and programming that they can use as they move into high school and future technology courses.

Suitable for Primary and Lower Secondary

Quickfire STEM activities

Stephen Broderick and Students, St Ursula's College



In this session you will be introduced to a range of activities that are designed to get students interested and involved in STEM.

- Calculating the speed of light with a bar of chocolate and a microwave oven. This is an introduction to the spectrum which leads into the next activity
- Using a home-made spectrometer to observe the Sun, light bulbs, etc
- Making a pinhole camera to produce a solargraph and determine the tilt of the Earth's axis
- Making an analemma, this is a whole year project and is a result of the Earth's axis
- Landing the Mars rover safely on Mars. Using CBR's to design a Mars lander vehicle (made from balloons)
- Zooniverse projects. real world data projects to get students engaged in STEM

Suitable for Primary and Secondary

Creator Kids

Brad Howard, Practical PD



Would you like to be the next Elon Musk, Walt Disney, Dr Fiona Wood, Kaylah Itsines, Mark Zuckerberg? Find out the secrets to becoming an entrepreneur such as the use of digital technology in their products and services. This hands-on workshop will introduce a proven formula and allow you to play with the tools of digital technology that enable these amazing entrepreneurs to excel in their field. Bring along your tablet computer for the session and allow your mind to open to the amazing opportunities that lay ahead for your generation.

Suitable for Primary and Secondary

Drones in STEM Education

Damien Aldridge and Natalie Anderson, STEM Punks



In this interactive and hands-on workshop we explore how Drones can be used as a teaching tool for project, and problem based learning.

Suitable for Primary, Secondary & Specialist

50 Mins of Code

Cameron Love, St Saviour's College

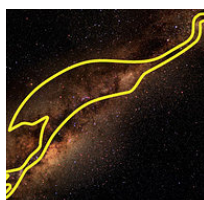


The Hour of Code is a global movement reaching tens of millions of students in 180+ countries. In this session students and teachers will learn to code together. A great opportunity for partnership!

Suitable for Primary and Secondary

An Introduction to Aboriginal Astronomy

Dr Michael Cowley, University of Southern Queensland / Macquarie University



In this session you will discover how Aboriginal and Torres Strait Islander peoples use observations of the night sky to inform decisions about some everyday activities, e.g. food gathering and ceremonies. The session will involve several hands on activities.

Suitable for Upper Primary

DIGI-DESIGN MINI WORKSHOPS

50 min parallel sessions held across 2 rotations
Student (Year 4 to 10 girls) and/or Teacher

*Listed program is subject to change

Growing Food as Medicine - a STEM project for schools

Professor Lindsay Brown
University of Southern Queensland



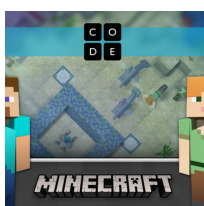
A recent global report highlighted that more than four in 10 children drink sugary drinks daily and one in three do not eat fruit each day. The researchers warn the standard of diets around the world was “diabolical”, and that problems such as obesity, anaemia and micro-nutrient deficiency were being neglected. What can schools do about this?

This session explores the science of functional foods and how they provide health benefits in chronic diseases such as obesity, hypertension, diabetes and inflammatory bowel disease, in addition to nutrition. Teachers will collaboratively discuss and work together on how they can create a STEM project for their schools where students grow functional foods and learn about the importance of a healthy diet.

Suitable for Secondary

Teaching Coding in Minecraft

Matthew Bishop, Highfields State Secondary College



Minecraft is well suited for educational purposes, because it's a game based solely on building things. Coding in Minecraft introduces basic coding skills in a 2-D world that mimics the same environment players would find in the popular software game. One of the best features is that there are a wide range of educational resources and “worlds” where you can learn about Science, Maths, Humanities, Languages and much more! In this session Matt will take you through the variety of tasks that could be set in different areas and will set you a task to complete using Minecraft.

Suitable for Primary & Secondary

Experimentary

Dr Robert Bell, Experimentary



Explore a new science education resource that is all about inquiry based learning. Designed by Dr Robert Bell (host of kid's science TV show Scope) there will be plenty of learning by doing and a bit of fun too!

Suitable for Primary



Programming Drones

Mukesh Soni, Pakronics



Drones are increasingly used in multiple ways in many industries – particularly within the agricultural and primary industries. From identifying and targeting weeds in crops, to finding livestock, to finding people in national parks, to use in photography, and so on. It is a technology whose time has come. Participants will work in pairs to experience programming a Drone to perform a range of flight tasks and complete missions. You should have basic knowledge of programming. This session will have limited seats and each participating student must be paired with a teacher.

Suitable for Secondary and Specialist

Two-Dimensional Visualisation for Girls

Peter Horton and Wayne Williams, St Mary's College Toowoomba



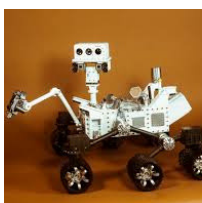
A recent article in a professional education publication suggests that girls often struggle with two-dimensional visualisation when participating in classroom activities. This often sees them struggle with lessons involving visualisation and can deter them from taking up subjects such as Physics and high-level mathematics, and therefore enter the field of engineering.

This workshop aims to collaboratively work as teams to come up with ideas and initiatives to help girls strengthen their visualisation skills. Teachers can even choose to present their ideas to the group by speaking about their initiatives or showing through the demonstration of technology.

Suitable for Secondary

Mission to Mars

Nicholas Strickland, St Mary's College Toowoomba



This workshop involves introducing students to the recent events of NASA sending rovers to Mars and the decisions that must be made in sending a programmable object to another planet without having anyone at the other end to correct any problems that may arise. Students will be asked to form groups of 3 and program their rover to navigate through a course with certain obstacles, with points awarded (and deducted) as the rover navigates through the course. Students will then participate in a group discussion to decide which rover is best suited for the Mission to Mars. Students learn to think and work collaboratively as well as mastering the ideas and skills around problem solving.

Suitable for Primary and Lower Secondary

DIGI-DESIGN MINI WORKSHOPS

50 min parallel sessions held across 2 rotations
Student (Year 4 to 10 girls) and/or Teacher

*Listed program is subject to change

STEAM Expo Area Hands-on activities area / Digi-design mini workshops

Suitable for Primary and Secondary

Griffith University - Forensic Science



Explore some of the aspects of Forensic Science with hands-on activities which will investigate DNA extraction, chromatography and water testing. DNA is often used as evidence in forensic investigations, learn how to extract the DNA from a piece of fruit to see what it looks like to the naked eye. Come along and learn about forensic science with Griffith's STEM Squad!

Spark Girlz: Andrea Madden and Steph Piper



Spark Girlz aims to teach electronics and hardware skills to young girls and its goal is to improve the 'pink aisle classics' with project-based kits teaching the basics of circuits that can glow, interact and delight.

Spark Girlz will be hosting a paper circuits' activity to create a colour cycling glow lamp (all ages)

St Saviour's College Students

Students from St Saviours College will have a range of hands-on activities (some based on material from Practical PD) using Spheros, Edison Robots, EV3's and Cubettos. Come and have a play and learn about coding!



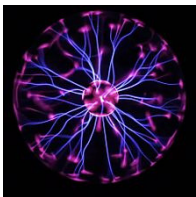
SAILS Students from Lake Clarendon IPS

The S.A.I.L.S academic excellence program at Lake Clarendon IPS is designed to provide intellectually challenging work for students who are excelling in Year 4 to 6. In this session the students will run a series of activities they have designed using the Kitsi blocks and Kitsune programming platform.

Be prepared to learn!



Dr Joanna Turner, USQ



Come and join Dr Joanna Turner in some fun physics experiments including the use of cyanotype paper to measure UV light and plasma globes to demonstrate physics concepts!

Integrated STEM: Ted Carter



Ted will be showcasing robotic systems and control technologies that are applicable throughout the majority of K-12 classrooms. The activities will incorporate novel sensing techniques inspired by the robotic research conducted at USQ.

Modern Teaching Aids: Tenneille Dawson

Tenneille will be running a range of activities through the day including hands-on activities with the Lego WeDO 2.0, Dash and Dot robots, and Sam Labs STEAM Kit. Come try, play and learn!



Displays from sponsors

- Pakronics
- STEM Punks
- Practical PD
- Math Mate
- Modern Teaching Aids
- Future Makers
- Experimentary
- EFEX/Konica Minolta
- OfficeMax

Pakronics

Pakronics will be demonstrating a range of award winning Kickstarter products that support the development of computational and design thinking. Explore how MakeBlock's Neuron electronics programmable building blocks can be used in a range of cool projects. Learn the basics of coding and sequential instructions using Matata Lab.



EFEX/Konica Minolta

We will be showcasing the next level of 3D printers for schools. The printers allow for greater printing speed, more intricate designs, and a broader range of industry grade materials. Come and have a try!



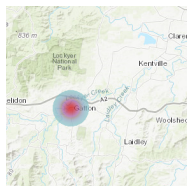
DIGI-DESIGN MINI WORKSHOPS

50 min parallel sessions held across 2 rotations
Student (Year 4 to 10 girls) and/or Teacher

*Listed program is subject to change

Shake it all about

Amanda Kilgour, QLD Dept of Education



Earthquake shakes Gatton!!

In this workshop you will be challenged to build a small scaled shake platform to test the earthquake readiness of local buildings. Participants will be encouraged to construct, test and refine prototype designs, modelling innovation and creative problem-solving

Suitable for Primary

Create a Chatbot

Joy Taylor, CoderDojo Toowoomba



Do you love to chat? Do you enjoy answering tricky questions? Do you wish you did not have to answer the same question over and over again?

Come along to this session and learn how to create a Chatbot....a computer program that will talk to you. You can set it up to just chat, ask you questions or provide the answers to those common questions. This session is great for anyone new to coding.

We will be using Scratch, and thinking about the design process first, as then the technical process.

Suitable for Primary

Collaborative Problem Solving with Electrical Components

Bill Whiting, St Ursula's College Toowoomba



Collaborative problem solving is at the heart of STEM subjects. It involves a team of individuals using the knowledge and skills of the entire team to solve a challenge. In this session participants will use the design process to work together to solve a range of tasks using LittleBits (electronic building blocks) and other electrical components.

Suitable for Primary

Founderfest - An Entrepreneur Experience

Joy Taylor, Startup Toowoomba



Have you ever wondered how famous businesses got started? Would you love to have your own business one day? Great businesses all start the same, with an idea and people who want to solve a problem. Come along to this session and experience what it is like to take an idea forward, find customers, create a brand, develop a prototype and work out how to make a profit. The best part is, you don't have to do it all alone, you will find co-founders to help you! This session is great for anyone who loves to solve problems and create new things.

Suitable for Secondary

PROBLEM SOLVERS DESIGN CHALLENGE

90 minute parallel sessions
Student (Year 4 to 10 girls) and/or Teacher

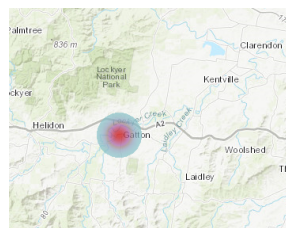
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Shake it all about - MegaEdition!

Amanda Kilgour, QLD Dept of Education

Earthquake shakes Gatton!! In this workshop you will be challenged to build a small scaled shake platform to test the earthquake readiness of local buildings. Participants will be encouraged to construct, test and refine prototype designs, modelling innovation and creative problem-solving.

Primary School Focus



The Great Desert Island STEM Challenge

Rachel Harlen, St Saviour's Primary School

You are a shipwrecked traveller stranded on a deserted island. In this problem solvers session you will be using the design process to tackle one of five STEM challenges and design something to help you survive and get back to civilization.

Primary School Focus



PROBLEM SOLVERS DESIGN CHALLENGE cont'd

International Year of Indigenous Languages

Joshua Waters and St Mary's College Toowoomba

Languages play a crucial role in the daily lives of people, not only as a tool for communication, education, social integration and development, but also as a repository for each person's unique identity, cultural history, traditions and memory. But despite this immense value and languages around the world continue to disappear at an alarming rate.

This problem solver session will be run collaboratively by the students from St Mary's College and Indigenous Support Officer from the Toowoomba Catholic Schools Office



Dream & Design - as innovative global citizens

Coomera Rivers State School

In 2015, world leaders agreed to 17 goals for a better world by 2030. These goals have the power to end poverty, fight inequality and stop climate change. Guided by the goals, it is now up to all of us, governments, businesses, civil society and the general public to work together to build a better future for everyone. In this Problem Solver session you will plan on how the global goals can be addressed at a local (school) level.



War on Waste: The WarCry

Derek Long, University of Southern QLD

There are many people who want to reduce their wastage and become more "green" but feel that there are a lot of barriers to living their life that way. In this session you will explore the challenges and come up with ways to inspire change in your immediate family and local community.



Connecting to Country through fire

Bunya Peoples' Aboriginal Rangers, Bunya Peoples' Aboriginal Corporation

There has been a dramatic decline in the health of Country (soils, water, plants, animals, sky, clouds, stars, us) over the past few years. We hear about it every day in the news. Could a better connection with Country and the use of the practices of Aboriginal peoples' make a difference? What are the barriers to this approach?



Getting to Mars

Stephen Broderick and Students, St Ursula's College

What are the things we need to think about when we go to Mars? What are the considerations and constraints? What can we learn about while we are in school that will prepare us for this future? In this Problem Solvers session your thinking will be challenged via paper rockets and landing a "rover" on Mars. Learn how to use freely available materials and technology to make design decisions.



An Age Old Problem

Adrian Bertolini, Intuyu Consulting

It is a common occurrence for the elderly to fall over and be unable to get up. Even worse they may not be discovered for several hours. These falls result in the loss of mobility and quality of life in the elderly, and frequently lead to premature death.

What can we do about this?



The Challenge with Being an International Student

St Mary's College Toowoomba

Participants will hear from 5 international students from high school / university who will present a problem that they have experienced as part of being an international student in Australia. These problems may range from limited communication skills, cultural differences, racism etc. Participants will then be asked to work collaboratively in a round table discussion to come up with an idea and proposal for how they might be able to solve these issues. Participants will then present their ideas to the audience and a winner will be announced for the best innovative idea / solution.



Self-Drive Cars: Who is in control here?

Matthew Bishop, Highfields State Secondary

The concept of self-driving cars has been around for years but only recently have increasing advances in networking, satellites, and laser equipment made this dream a reality. As cars become self-driving there is going to be a large amount of time when human drivers and robotic drivers have to interact. How are we going to make sure everyone plays nicely?



Flow of the day....

8.15am Arrive for Registration, coffee and networking

8.45am Master of Ceremonies - Welcome, set up for the day and housekeeping

9.00am **KEYNOTE SPEAKER - STEPH PIPER** Tinker, Maker, Printer, Sparker!

9.35am **ROTATION ONE**

Teacher Mini-Master Classes - 50min sessions - 3 in parallel

- Launching Students into the 21st Century
- Learning Algebra through Gamification
- Creator Kids for Teachers

9.35am **DigiDesign Mini-Workshops - 50min sessions - 14 parallel workshop stations**

- Drones in STEM Education
- Virtual Reality (VR) in Learning
- An Introduction to Aboriginal Astronomy
- Coding & electronics with Micro:bit
- Growing Food as Medicine - a STEM project for schools
- 3D Printing Futures
- Robot Sandwich Maker
- Using social media to generate interest and make a difference to issues you care about
- Patterns and Mathematics in Art
- Collaborative Problem Solving with Electrical Components
- STEAM Expo Area: hands-on workshops
- Shake it all about
- Create a Chatbot
- Experimentary

10.35am **MORNING TEA**

An opportunity to network with other teachers and students, and explore trade displays

11.05am **PROBLEM SOLVERS DESIGN CHALLENGE**

90min session - 10 parallel sessions for teachers and Yr 4-10 students

- War on Waste: The WarCry
- Getting to Mars
- Solving an Age Old Problem
- The Challenge with Being an International Student
- International Year of Indigenous Languages
- Self-Drive Cars: Who is in control here?
- Connecting to Country through fire
- Dream & Design - as innovative global citizens
- Shake it all about - Mega Edition
- The Great Desert Island STEM Challenge

12.45pm **LUNCH**

An opportunity to network with other teachers and students, and explore trade displays

1.30pm **KEYNOTE SPEAKER - DR CAROLYN BROWN Astrophysicist**

2.05pm **ROTATION TWO**

Teacher Mini-Master Classes - 50min sessions - 3 in parallel

- Future City Makers - 3D Design, Virtual Reality & Augmented Reality
- 3D Printing and Entrepreneurship
- Experimentary

2.05pm **DigiDesign Mini-Workshops - 50min sessions - 15 parallel workshop stations**

- Virtual Reality (VR) in Learning
- 3D Printing Futures
- An Introduction to Aboriginal Astronomy
- Teaching Coding in Minecraft
- Quickfire STEM activities
- Creator Kids
- Two-Dimensional Visualisation for Girls
- iCreate - Invention Convention
- Using social media to generate interest and make a difference to issues you care about
- Mission to Mars
- Programming Drones
- Patterns and Mathematics in Art
- STEAM Expo Area: hands-on workshops
- 50 Mins of Code
- Founderfest - An Entrepreneur Experience

3.05pm **WHERE TO FROM HERE**

Industry Experts pitch themselves to students and teachers - this exciting piece of the program gives you the opportunity to ask questions, build connections and networks, and hear first hand from experts in an open forum .

3.40pm **FEEDBACK AND CLOSE OF THE CONFERENCE**

Fill in your feedback forms and be invited to be on the Steering Committee for next year.

4.15pm **ADDITIONAL STEAM Networking event for students (Years 9-12), Teachers and Leadership**

Thursday 9 May 4.15pm - 5.30pm

WHERE TO FROM HERE? SESSION

Opportunity for teachers and students to meet with university and industry experts, expert teachers and inspiring students. The intent of this session is to build connections and networks to continue growing and learning after the conference.



Keynote Speaker
Steph Piper is currently the Patron of the Brisbane Hackerspace and the Community Engagement Coordinator at USQ



Keynote Speaker
Dr Carolyn Brown Astrophysicist and a Physics Lecturer at the University of Southern Queensland



Sarah Gallegosis an Operations Engineer with Shell's QGC business. She loves bringing STEM subjects to life and is proud of QGC's Future Makers partnership which brings STEM development opportunities to schools in the Western Downs where she lives and works.



Dr Rob Bell
Best known for donning his trusty white lab coat and jumping into science as the host of the kid's science TV show Scope. A Bachelor of Science with Honours and a PhD in materials chemistry from UQ.



Sarah Hales
General manager of the Toowoomba Wellcamp Airport. Oversees the operational and commercial management of the \$250 million facility and leads a team of 67 staff in her role.



Emma Moss
Was a jillaroo, photographer, writer, a social media influencer and is now a student at the University of Queensland, Gatton studying a Bachelor of Sustainable Agriculture.



Dr Joanna Turner is a Senior Lecturer (Physics) in the Faculty of Health Engineering and Sciences at the USQ. Her research area centres around improving measurement and monitoring of ultraviolet (UV) radiation.



Dr Kristen Knight Is an entomologist, who also has a degree in psychology! She has been a leading researcher in Bayer's Toowoomba-based Research Centre for the past 12 years.

It Takes a Spark!

EDU Conference

Thursday, 9 May 2019 | Toowoomba

REGISTRATION: spark-educonferences.com.au/toowoomba-9-may-2019-registration/

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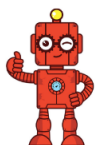
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QGC



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