



CRYSTALLISING STEM CAREERS

NOVEMBER 2021 - MARCH 2023

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CONTENTS



MAY 2023

- 01** A letter from the Vice Chancellor and President - page 1
- 02** Introduction - page 2
- 03** About - pages 3 & 4
- 04** Project Partners - page 5
- 05** Resources - page 6
- 06** Project Overview - pages 7 & 8
- 07** Engagement - pages 9 & 10
- 08** Reach - pages 11 & 12
- 09** Student Impact - pages 13 & 14
- 10** Gallery - pages 15 & 16
- 11** Promotional Material - page 17
- 12** STEM Careers - page 18
- 13** Case Studies - pages 19 - 24
- 14** Parents and Carers - pages 25 & 26
- 15** Unexpected Impact - page 27
- 16** Future Plans & Sustainability - page 28
- 17** Financials - page 29
- 18** Certificate - page 30

A LETTER FROM THE VICE CHANCELLOR AND PRESIDENT

The University of the Sunshine Coast's aspiration is to partner with regions as they grow and develop, to provide new capability, build capacity and form strategic partnerships with schools, business and industry to support local success. The Crystallising STEM Careers project aligns with the university's mission of "enriching our regions, connecting with our communities and creating opportunities for all."

The demand for STEM skills is expected to increase rapidly over the next five years, but Australia is facing a shortage of skilled STEM professionals. This shortage is a significant issue for Australia's economy and competitiveness, as many of the fastest-growing jobs in Australia require STEM skills, and the country's ability to innovate and compete in a global economy will be determined by its ability to produce and attract skilled STEM professionals.

I recognise that STEM skills are crucial for Australia's changing future and the Crystallising STEM Careers Project aimed to address this shortage by improving the quality of, and access to, locally based career guidance for students in Years 4 - 10 and their parents/carers. The project highlights the achievements of women in STEM, and included female experts, preservice teacher presenters, assistants, and role models from UniSC, business and industry.

The successful completion of this project would not have been possible without the collaborative effort and dedication of everyone involved. We are proud of the project's success and the positive impact it has had on students, parents/carers, and the wider community.

The project highlights the achievements of women in STEM, and it included female experts, preservice teacher presenters, assistants, and role models from UniSC, business and industry. The initiative provided face-to-face workshops for parents and carers to inspire and motivate their children to have positive capability beliefs and attitudes towards STEM.

Professor Helen Bartlett
Vice-Chancellor and President



INTRODUCTION



The Crystallising STEM Careers project was designed to bring about systemic change in STEM career uptake by preparing Year 4 – 10 students to make informed decisions about engaging in STEM subjects at school, future transition into tertiary studies and STEM careers.

The project provided innovative STEM-focused Career and Technical Education (CTE), delivered face-to-face in a series of lessons with students in schools and via interactive workshops for parents/carers. CTE refers to educational programs that focus on providing students with the academic and technical skills required in a specific career or industry.

Using STEM-focused CTE, our programs were designed to develop a growth mindset towards academic achievement in Science, Mathematics and Technologies, alongside the development of critical and creative thinking skills, collaboration and problem-solving skills required in STEM careers.

The project provided a unique and valuable opportunity for students and parents/carers in the South East QLD North, Wide Bay Burnett and Central QLD regions.

ABOUT



The Crystallising STEM Careers project, is an evidence-based STEM-focused initiative which translated research into lessons designed to successfully alter male and female perceptions of STEM skills, careers, and tertiary pathways.

Research indicates that the optimal time for STEM intervention projects is in middle childhood and adolescence, as interests in Mathematics and Science develop at this time (Maltese & Tai, 2011). Our research conducted in 2020, supports the idea that introducing students to STEM concepts before high school can instill positive self-beliefs, confidence, and interest in STEM (McMaster et al, 2023).

The project focused on participants recognising their abilities in STEM and developing a growth mindset by practicing STEM industry skills in activities designed to need persistence, yet also enabled participants to achieve confidence in their skills by completing the activities successfully.

Maltese, A. V., & Tai, R. H. (2011). Pipeline persistence: Examining the association of educational experiences with earned degrees in STEM among US students. *Science Education*, 95(5), 877-907. <https://doi.org/10.1002/sce.20441>

McMaster, N., Carey, M. D., Martin, D. A., & Martin, J. (2023). Raising Primary School Boys' and Girls' Awareness and Interest in STEM-Related Activities, Subjects, and Careers: An Exploratory Case Study. *Journal of New Approaches in Educational Research*, 12(1), 1-18. <https://doi.org/10.7821/naer.2023.1.1135>

"I REALLY ENJOYED
THE FIRST TIME WE
LEANT HOW TO CODE.
THANK YOU FOR THE
AWESOME ADVENTURE"

-YEAR 6 STUDENT



The project design was based on six pillars, which were embedded into the content and structure of its lessons, career videos and workshops for parents and carers. It is based on the belief that early positive engagement in inquiry-based, hands-on STEM activities is critical for students' success in the field.

6 Pillars

1. Providing school-based programs in middle childhood and adolescence
2. Focusing on ability and interest enhancement
3. Challenging stereotypes about STEM occupations
4. Relevance of STEM skills to real careers
5. Inclusion of stakeholders (teachers, parents, community, business and industry)
6. Results of project fed back into research.

The project highlighted the achievements of women in STEM and ensured that its lessons, workshops, videos and resources included female experts, preservice teacher presenters, assistants and role models from UniSC, business and industry. This role modelling was designed to remove perceptions that STEM careers are only for males and provides students with opportunities to talk to presenters about their experiences in education post high school.



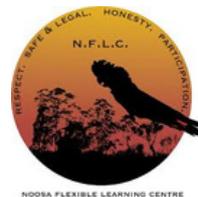
The project team collaborated with schools and industry partners to develop and deliver activities that aligned with the project's objectives. The collaboration between these partners helped to enhance the quality of the delivery in the region and aimed to inspire students to pursue STEM subjects and careers.

"WE LOOK FORWARD TO CONTINUING A PARTNERSHIP WITH UNISC AFTER THE END OF THE GRANT PERIOD. "

-PAUL MEAD, CO-FOUNDER, SHE MAPS

The school partners provided access to students, teachers, and facilities, while industry partners provided in-kind, professional development opportunities and technical support.

The partnership efforts made by the project team, schools, and industry partners contributed significantly to the success of the project, enabling a wider reach and delivery of more activities in the regions.



RESOURCES

The resources designed for the project are freely available for communities to access online via the MindSET-do website <https://mindset-do.edu.au>

The lessons are:

- **Year 4** – Creating a serious game using Scratch (a free programming language developed by MIT) – linked to industry skills and careers in game design and computer science.
- **Year 5** – Using micro drones (programmable drones for indoor use weighing less than 90 grams) to solve environmental challenges in the local community – linked to industry skills and careers in drone design and computer science.
- **Year 6** – Controlling light using Arduino (an open-source electronics platform)– linked to industry skills and careers in electrical engineering, design and computer science
- **Year 7** – Programming a self-driving car using BBC micro:bits (small programmable computers designed for educational purposes)– linked to industry skills and careers in the autonomous vehicle industry.
- **Year 8** – Changing nations – linked to industry skills and careers in urban design, environmental engineering and future careers in renewable and smart cities
- **Years 9** – Brain, Health & Wellbeing – linked to industry skills and careers in neuroscience, psychology, health and wellbeing
- **Year 10** – Citizen Science – linked to industry skills and careers in science research, science communication, environmental education and data analysis in fields such as ecology, biology and biochemistry.

Careers resources:

The careers posters, videos and role model interviews are all available for free to download from the MindSET-do website or YouTube channel.

Parent resources:

The MindSET-do website has a range of resources for parents to view at no cost.



PROJECT OVERVIEW

Crystallising STEM Careers Project



The University of the Sunshine Coast worked in collaboration with its project partners to design and deliver the Crystallising STEM Careers project.

The project delivered lessons which prepared Year 4 – 10 students for jobs of the future and enhanced their readiness to make informed education and career-related decisions about engaging in STEM subjects at school, future transition into tertiary studies and STEM careers.

The project also delivered face-to-face workshops for parents/carers. They learnt how to inspire and motivate their children to have positive capability beliefs and attitudes towards STEM. Participants also learned about the future of work, STEM careers and how to support student interest in STEM at school, in community programs and tertiary studies.

"I LIKED DOING THE TECHNOLOGY AND SCIENCE ACTIVITIES, AND PROGRAMMING THE DRONES TO DO DIFFERENT AND COOL THINGS."

-YEAR 5 STUDENT

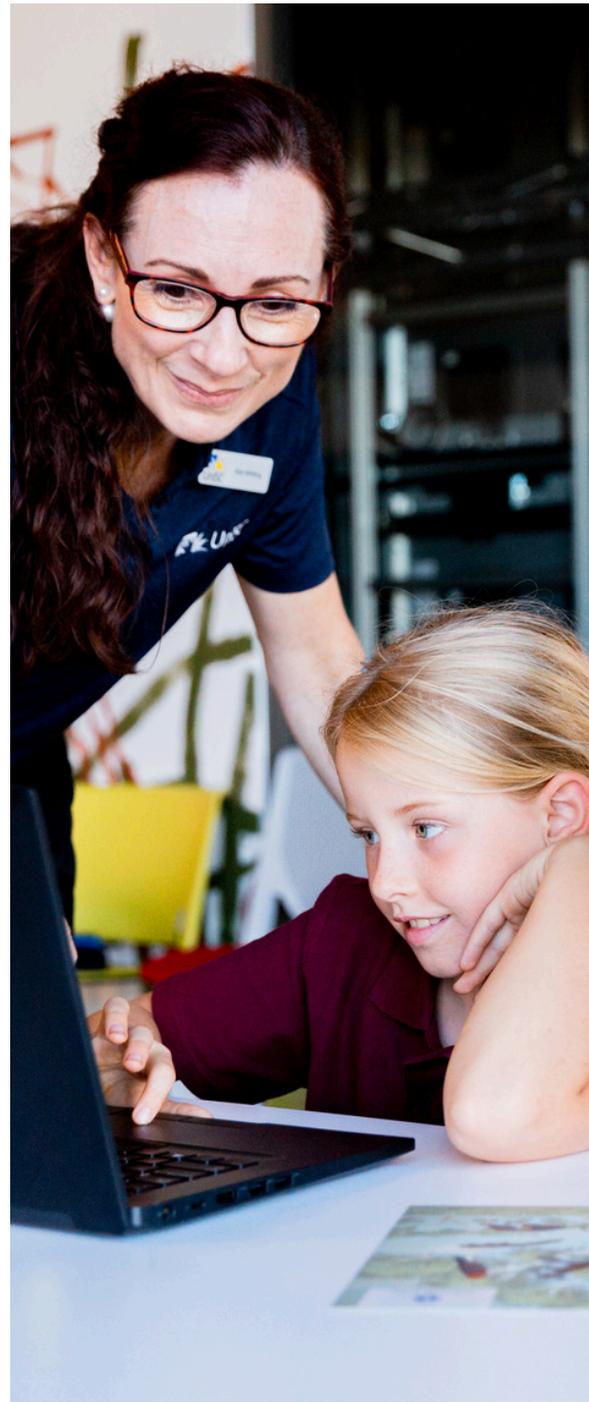


"THE HIGHLIGHT FOR ME WAS MEETING NEW PEOPLE AND WORKING WITH THE UNI TEACHERS."

-YEAR 6 STUDENT

PROJECT OUTCOMES

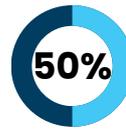
- Increased Year 4 - 10 students' engagement in STEM-focused career and technical education.
- Inspired and motivated Year 4 - 10 students to have positive capability beliefs and attitudes to STEM.
- Increased Year 4 - 10 students' interest in current school-based education.
- Strengthened engagement between UniSC and stakeholders in STEM-focused career and technical education in the region and beyond.
- Increased preservice teachers' confidence in teaching STEM in the classroom, managing behaviour and modifying lessons to cater for all students in the classroom, thus strengthening UniSC graduate employment.
- Raised parent/carer, teacher, and community awareness of the future of work, STEM careers and how to support student interest in STEM at school, in community programs and tertiary study.



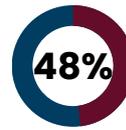
ENGAGEMENT



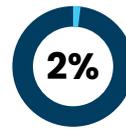
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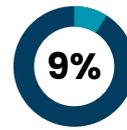
Female



Male



Preferred to self-describe



Identified as Aboriginal or Torres Strait Islander

The Primary School program used innovative STEM-focused CTE designed by teachers, for teachers and focused on the development of STEM skills and computational thinking using technologies such as Arduino, Scratch and micro drones.

"I LOVED LEARNING ABOUT THE DRONES AND HOW THEY HELP PEOPLE AND FARMERS DO THEIR JOBS."

-YEAR 5 STUDENT

PRIMARY YEARS 4-6

The programs provided students in Primary school with exposure to STEM activities and experiences, and also information on STEM careers and further study post schooling.

SECONDARY YEARS 7-10

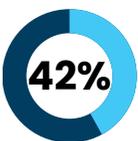
The Secondary School program used innovative STEM-focused CTE designed by teachers for teachers. The lessons focused on the development of STEM skills, computational thinking, science communication and science inquiry skills in Years 7, 8, 9 and 10.

"MY HIGHLIGHT WOULD PROBABLY BE SEEING THE CAR ACTUALLY WORK AND HOW IT COULD DETECT THE WALLS WITH THE SENSOR, IT REALLY AMAZED ME!"

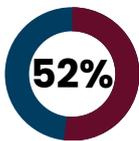
-YEAR 7 STUDENT



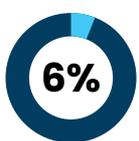
546



Female



Male



Preferred to self-describe



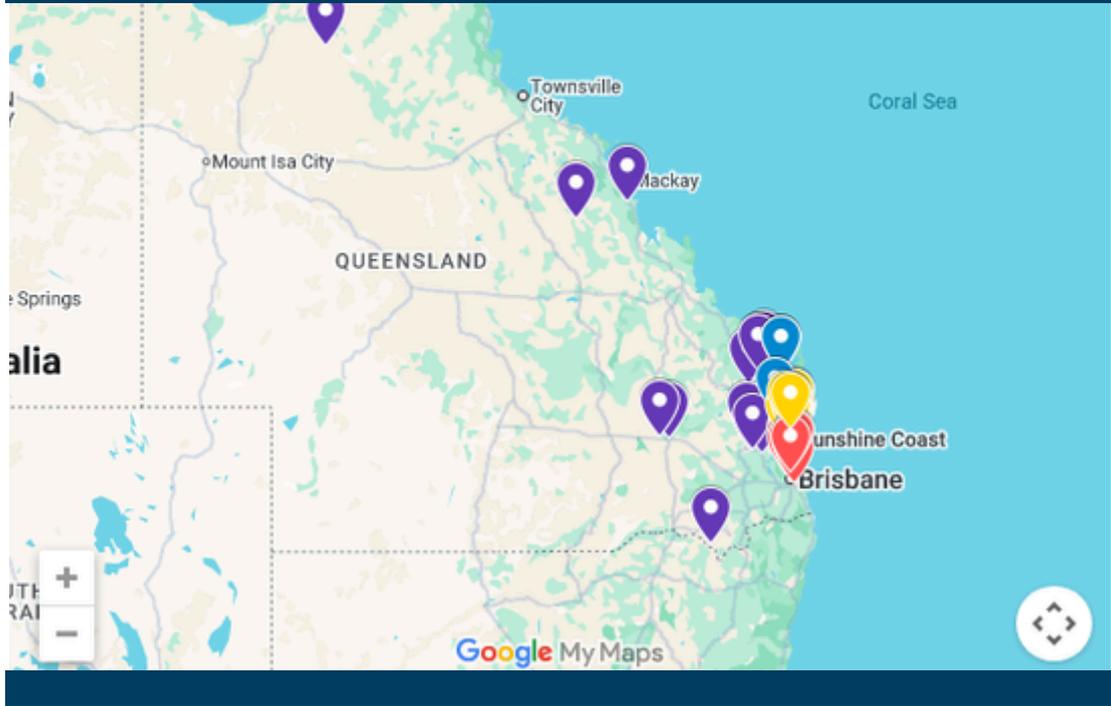
Identified as Aboriginal or Torres Strait Islander

The program was designed to alter perceptions of STEM and provide students with activities and experiences linked to real careers. Students were provided with information on subject selection and pathways into tertiary studies post schooling with a STEM focus.





Map of engagement




Sunshine Coast
23 Schools


Moreton Bay
15 Schools


Wide Bay-Burnett
11 Schools


Regional Qld
15 Schools

Sunshine Coast	Moreton Bay	Wide Bay–Burnett	Central QLD
Baringa State High School	Australian Christian College	Bayside Christian College	Benarkin State School
Buddina State School	Bellmere State School	Childers State School	Koumala State School
Buderim Mountain State School	Bounty Boulevard State School	Cooloola Christian College	Moranbah State School
Caloundra City Private School	Ferry Grove State High School	Goodwood State School	Regional QLD
Chancellor State College	Genesis Christian College	Riverside Christian College	Biggenden State School
Chevellum State School	Humpybong State School	St James Lutheran College	Blackbutt State School
Coolum Beach Christian College	Kippa Ring State School	St Joseph's Catholic Primary	Bunkers Hill State School
Glasshouse Christian College	The Lakes College	St Patrick's Gympie	Craigslea State School
Kawana Waters State College	Living Faith Lutheran Primary	Star of the Sea Catholic Primary	Croydon State School
Maroochydore State High School	Narangba Valley State High School	Victory College	Drillham State School
Meridan State College	Norman Park State School	Xavier Catholic College	Harlin State School
Montville State School	Spring Mountain State School		Linville State School
Mountain Creek State High School	Somerset Hills State School		Miles State School
Nambour Christian College	St Paul's School		Nanango State School
Nirimba State School	St Peter's Catholic Primary School		St Patrick's Primary Nanango
Noosa District High School			Texas State School
Noosa Flexible Learning Centre			
Palmview State School			
Peregian Springs State School			
St Andrew's Anglican College			
Noosa Pengari Steiner School			
Sunshine Beach State School			
Sunshine Coast Grammar			

64 Schools



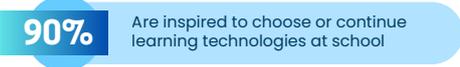
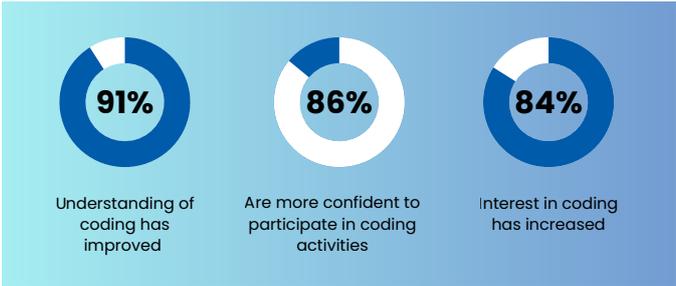
STUDENT IMPACT

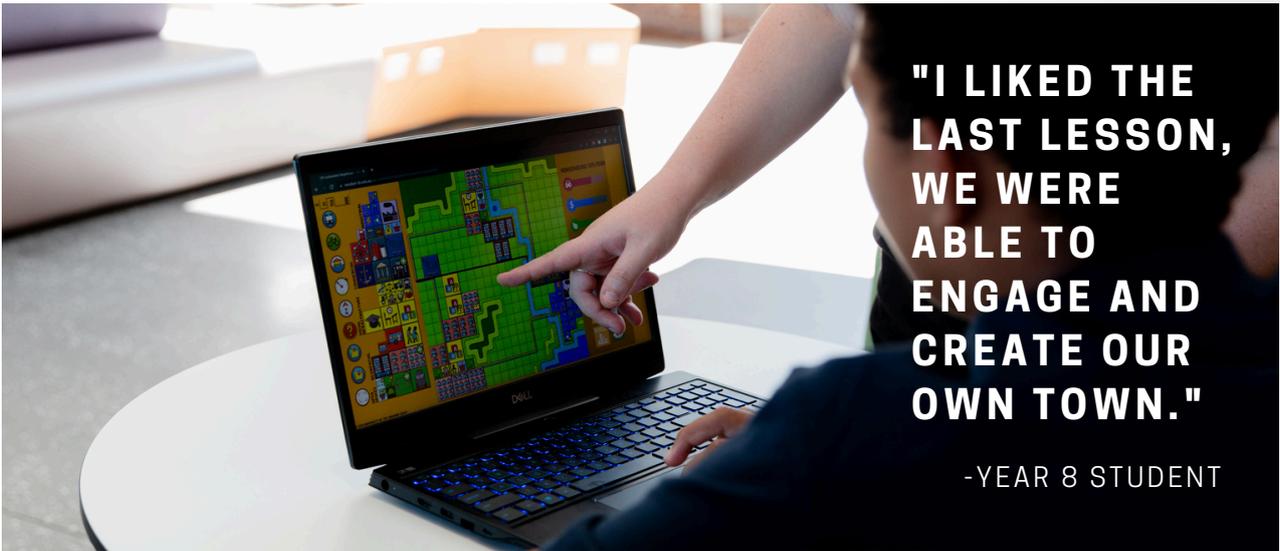


Online surveys were conducted post-lesson to evaluate the impact of the project. Below is a set of infographics which outline the results of the surveys and the impact of the project.

The data collected from these surveys can be used to make informed decisions about how to improve future lessons and create more effective STEM programs and career education.

PRIMARY





**"I LIKED THE
LAST LESSON,
WE WERE
ABLE TO
ENGAGE AND
CREATE OUR
OWN TOWN."**

-YEAR 8 STUDENT

SECONDARY

77%

of students enjoyed the lessons

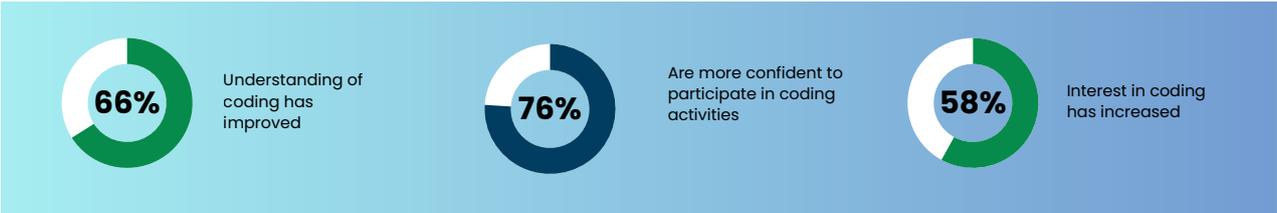


73% Are inspired to choose or continue learning technologies at school

58% Are inspired to choose or continue learning science at school

65% Are more aware of STEM career options

60% Are more confident undertaking STEM activities



ALL YEAR LEVELS



Enjoyed the lessons



Would like to do other lessons like these

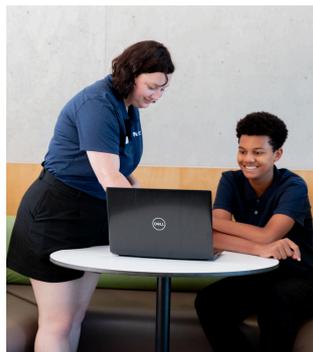
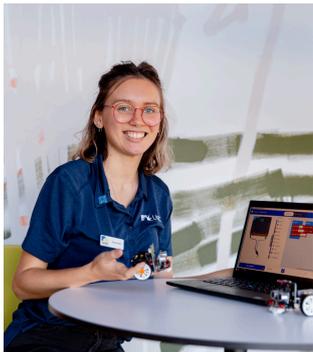
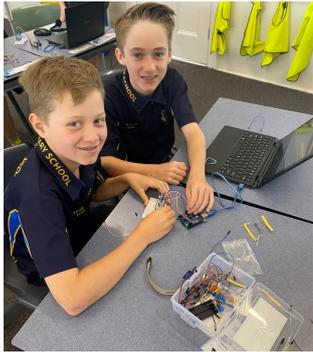


Are more likely to consider going to university or TAFE in the future

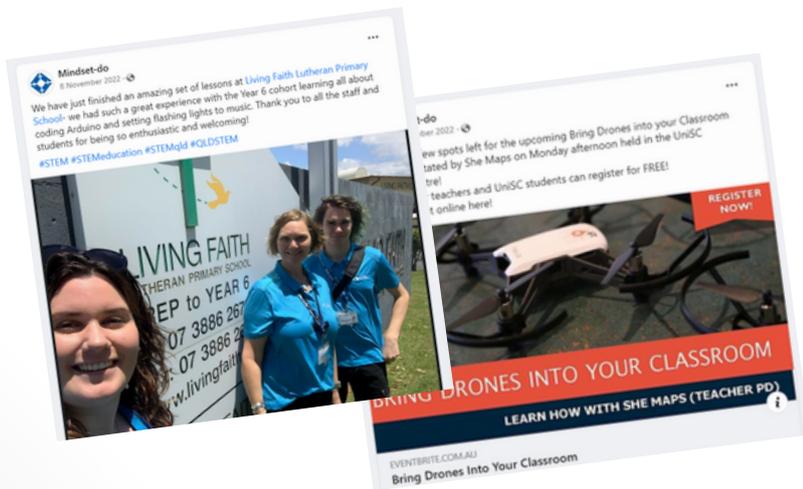


GALLERY





PROMOTIONAL MATERIAL



The 'T' in STEM parent and carer workshop

Supported by a National Careers Institute Partnerships Grant
University of the Sunshine Coast

Why are we delivering this workshop?

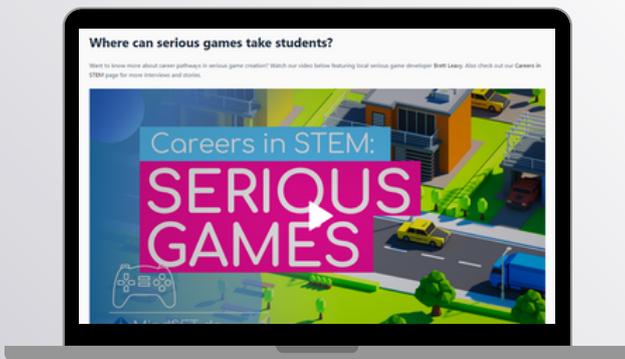
Right now, almost half of today's jobs are set to be impacted by technology. 40% of Australia's best paid jobs are in ICT and jobs of the future will all involve ICT skills. Australia is in the midst of a severe STEM skills shortage and one contributing factor is the low number of female students selecting STEM school subjects and careers.

The University of the Sunshine Coast and Mountain Creek State High School have designed a parent and carer workshop to educate parents and students about STEM subject selection in high school, STEM careers and STEM pathways into university. In particular, our focus will be on the 'T' in STEM which is Technologies. The aim of the workshop is to provide you with information about the future of work in relation to Technologies and the range of opportunities that studying technologies can provide students.

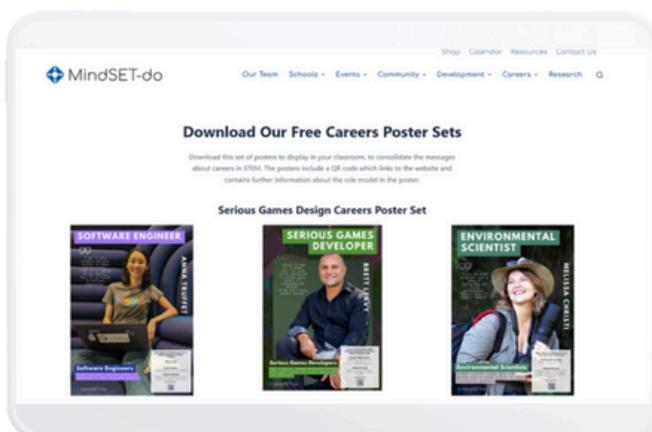
How to talk to your child about careers in STEM

When talking to your child about careers in STEM, here are some steps you can follow:

1. Start by identifying their interests and passions. Ask what kind of activities and subjects they enjoy the most and see if there are any STEM careers related to those interests.
2. Explain the importance of STEM in today's world and how it affects their daily lives. Show them examples of how STEM is used to solve real-world problems and improve our quality of life.
3. Encourage hands-on learning opportunities like science events and activities, robotics clubs, coding classes, or other STEM-related activities that can give your child a chance to explore and experiment.
4. Make connections to role models and successful people in STEM fields. Show your child that STEM careers are accessible and there are a variety of



STEM CAREERS



CASE STUDY- 1

She Maps Industry Partner

It has been our pleasure to collaborate and partner with UniSC on this project over the last two years, particularly at a time when our teaching community has needed additional support. We have upskilled many UniSC Preservice teachers to use our drone and geospatial program in the classroom. But beyond the skills of using this program, we have seen participants increase their confidence in using technology more broadly, and how to incorporate this into their teaching.

The increase in confidence is a critical part of enabling the effective use of technology in building relevant and meaningful lessons in schools. Without this confidence, then teachers are less likely to incorporate technology in their lessons, and our students will ultimately lack these vital skills as they progress through their education and enter the workforce.

By partnering with UniSC, we have also seen the growth in engagement of Sunshine Coast schools in our other programs. This shows that the program UniSC has provided, and our partnership is having a sustainable impact on the school community beyond the activities of the grant. We look forward to continuing a partnership with UniSC after the end of the grant period.

Another positive outcome from the grant has been our employment of one of the preservice teachers in our business once she completed her studies. Leah started the program with UniSC lacking in her own confidence to teach with technology, and she is now in a role where she is working with teachers to support their implementation of technology in their classrooms. This shows the power of the program that UniSC has developed and delivered, and the impact it can have on individuals in creating jobready graduates as well.

Paul Mead
Co-founder, She Maps

CASE STUDY-2



UniSC Alumni, Patrick Bailey

Working with this project enabled me to cultivate confidence, implement my academic knowledge, and gain valuable experience in teaching STEM subjects. Through the project, I had the opportunity to put into practice what I had learned during my degree and professional development training.

Stepping into schools and teaching technology content areas provided a platform for me to enhance my teaching practice and the experience opened doors to teaching STEM subjects that I had never considered before. As I continued working with the project on a casual basis, my confidence flourished alongside the diverse group of students I interacted with.

At the end of my studies I took on a more advanced training role within the project. This role allowed me to further enrich my experience in teaching STEM subjects, fueling my passion for technology education. During my employment in the project, I received numerous offers from schools looking for Technologies teachers. I learned that teachers with STEM skills and STEM teaching experience are highly sought after.

Participation in the project enabled me to diversify my teaching portfolio and find a teaching area that I was really passionate about. At the conclusion of the project, I gained a fulfilling full-time position as a Technology teacher in the Gladstone region.

Patrick Bailey

Digital Technology Teacher
Toolooa State High School

CASE STUDY- 3

A letter to the Government

Dear Government,

The STEM activities teach us more about the world around us. They inspire us to want to learn new things, to appreciate what we have now more than we ever have.

My favourite part of about STEM is learning how to code and making new friends and I think you should give some more funding for STEM so other less fortunate children can experience the learning I've been so lucky to be a part of and enjoy.

We will endeavour to concentrate and learn to be part of groups, rather than just stick with our old learning groups.

I hope you get my letter.

From Olive, 10 years old

Program participant

CASE STUDY- 4

Year 5 & 6 experience Term 1, 2023

Diana, from the MindSET-do Project visited my 5/6 class for 3 sessions on controlling light using Arduino. Each session was an advancement on the previous and all students were eager and engaged to participate. The sessions were run very professionally and Diana came well organised and enthusiastic. It was great not to have to set anything up and all the equipment came in small packs making it easy to distribute. All the instructions and lesson intentions were clearly explained and identified making it easy for students to follow along with.

The class really enjoyed the choice in challenges towards the end of the lesson and being able to connect with Diana, on a one to one basis and ask her questions. It was a rewarding experience and a great eye opener for many of the students into the world of STEM and how they may be able to advance into these fields in the future.

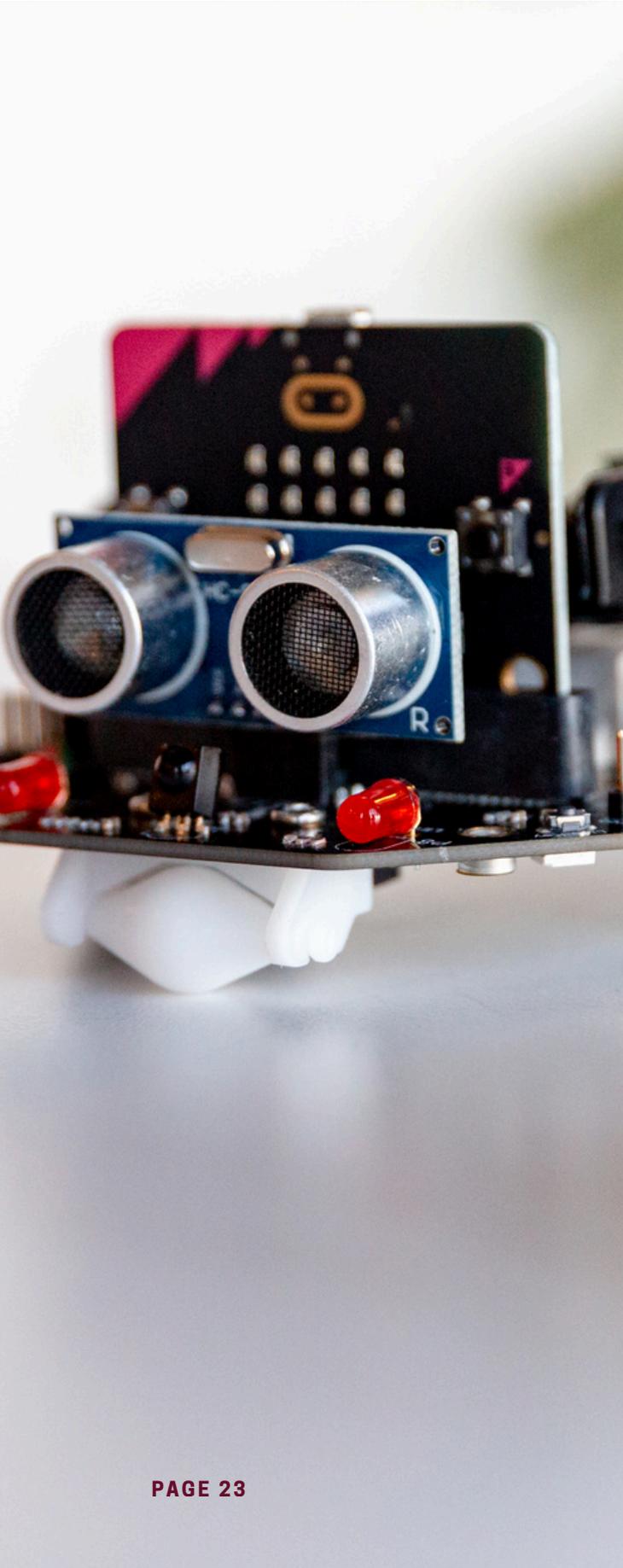
Every student was able to engage in the activities regardless of their skill level or prior knowledge and it was all well scaffolded for every student to succeed. I have had many of my students now ask if we can work with Arduino again and we are looking into getting some sets for our Tech Clubs to manage during lunch time activities.

Big thank you to Lana and Diana for such a great experience, we hope we get to do some more sessions in the future.

Emily Smith
5/6 Classroom teacher

Montville State School

CASE STUDY- 5



Year 7 experience Term 3, 2022

The Year 7 presenters were excellent with the self-driving car activity. All female, they used their skills to engage the students in the hands-on activities.

The change to BBC micro:bits slotted nicely with our own change to BBC micro:bits, as it's very enabling technology with accessible levels of sophistication required. The feedback from students has been universally positive and there was great excitement at the end of the session each day.

There has been increased engagement shown by students in all classes around STEM-focused careers and students developed strong self-belief having achieved desired outcomes in the activities and now view STEM more favourably.

Our school continues to develop strong ties with UniSC, specifically around STEM-focused career pathways, and the program most definitely marked improvement in awareness around STEM careers, and to foster discussions at home about potential STEM-based career pathways.

Graeme Breen, Digital Innovation

Mountain Creek State High School

CASE STUDY- 6

Year 8 experience Term 1, 2023

The STEM lessons designed and delivered by UniSC gave insight to our students about various careers in Science. The lessons inspired and motivated our students about the importance of the STEM subjects and career options available to them at school and at the tertiary level.

The UniSC STEM lessons have helped increase the number of students doing STEM-based subjects in their Senior years at our College. The program has helped strengthen the collaborative relationship between our College and UniSC. A number of our students have expressed interest in undertaking the UniSC's Head Start program in Year 11 in 2024.

The UniSC STEM program was enthusiastically accepted by the parents of the students undertaking the program. They expressed that the program encouraged their child to start thinking about occupations in STEM areas as possible future careers. The program also provided graduate and postgraduate students from UniSC the opportunity to deliver vital STEM information to the next generation of students.

Fenton Doolan, HOD Science

Glasshouse Christian College



Parent/Carer Workshops



The University of the Sunshine Coast in partnership with Mountain Creek State High School, designed a parent/carers workshop to educate parents and students about STEM subject selection in high school, STEM careers and STEM pathways to university.

The workshops delivered in 2022 and 2023, were designed to focus on the 'T' in STEM, as technology and ICT studies in high school and post school study has been an area that we wish to strengthen in the region. Technology is poised to impact the existing job landscape, with 40% of Australia's highest-paying positions belonging to the ICT sector. Looking ahead, all future job prospects will entail ICT skills and it is important for the community to understand this.

The workshops began with an industry representative who shared with attendees information on their career and education pathway into the industry, highlighting what they like about working in STEM and their current role. Parents/carers and students participated in hands-on activities using technologies currently used in high school technologies subjects, and were presented with information on pathways for study in high school and pathways into tertiary study. The primary objective of the workshop was to equip parents/carers, teachers, and students with comprehensive insights into the evolving world of work concerning Technologies.

IMPACT



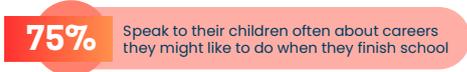
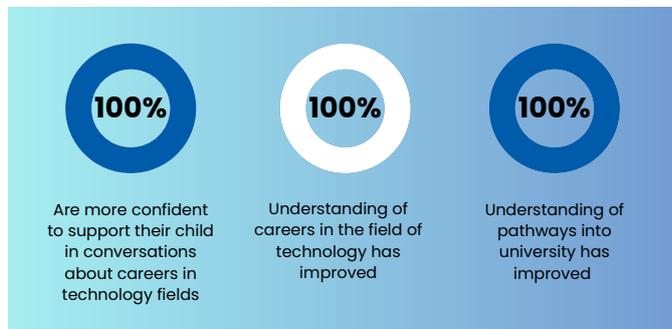
"We had good engagement from the workshop. The feedback I got from everyone was all very positive. We had a number of students sign up to our STEM academy as a result of the evening. The parents said it was good to learn something new and work alongside their child. Everyone was really impressed by the AI videos and this sparked a lot of conversation."

**Stephen Reid, Head of Department
Innovation Technology & Interactive Learning
Meridan State College**

100%



of parents enjoyed doing the hands-on activities with their child



"WE UNDERSTAND ITS HARD FOR HIM TO KNOW WHAT HE WANTS TO DO, SO WE TRY AND GIVE HIM THE MOST INFORMATION WE CAN ON CAREERS."

- PARENT



UNEXPECTED IMPACT

An unexpected benefit from the project was that some parents who attended the parent/carer workshops, were interested in furthering their own careers as well as their child's.

At the conclusion of the parent/carer workshops the student ambassador from UniSC would speak about pathways into university STEM fields. On a number of occasions parents asked how they themselves could transition back into university. One parent mentioned she had completed an IT degree many years ago and was interested in learning more about how to update her qualifications so that she may explore a career in cybersecurity.

Whilst the project was focused on educating parents/carers about how they can support their child to explore the possibility of a STEM career, parents wishing to change direction in their own careers was not an expected benefit.



Reach from other sources	
Facebook Page Reach (Jan 2022 – March 2023)	86,361
Instagram Page Reach (Jan 2022 – March 2023)	17,893
Total Lesson Resource Downloads	155
Total Unique User Downloads	105
Total Unique Schools	80

FUTURE PLANS & SUSTAINABILITY



The sustainability of the project past the life of the grant will be supported by UniSC ensuring that educators can access the free teaching resources, careers videos and parent/carer workshops online. A loaning scheme will be set up so that equipment from the project can be loaned by schools for the implementation of the lessons. Business and industry will also be encouraged to use the lessons and workshops in their own funded engagement activities with schools and community to ensure the sustainability of the project in the future. Implementing these strategies will create a sustainable framework that allows participants to continue benefiting from the project's resources, expertise, and engagement activities. This approach ensures that the impact of the project extends beyond the grant period, promoting long-term access to STEM-focused career guidance and support for the participants involved.

The project's ongoing impact lies in the sustained accessibility of resources, the sustainable implementation of lessons, extended collaboration with business and industry, and the long-term development of communities. These elements will contribute to the continued growth of STEM-focused career awareness, skills, and opportunities for participants even after the project's funding has ceased. The ongoing collaboration with schools, business and industry partners will provide up-to-date career information and opportunities for communities, while strengthening local capital and resources to support STEM career education in the community.



FINANCIALS

FINANCIAL STATEMENT				
				
Funding Body:	Department of Industry, Science, Energy and Resources			
Project Name:	Crystallising STEM Careers			
Chief Investigator:	Dr Natalie McMaster			
External Ref:	NCIPII000141			
Internal Ref:	1.036.07932			
EXPENDITURE-Cash				
	7/04/2022	7/10/2022	31/03/2023	Total
Salaries	41,195	167,915	129,761	338,871
Audit	0	0	2,950	2,950
Communications & Promotions	935	842	4,688	6,464
Computer Equipment & Software	44,759	7,542	17,079	69,380
Contractors	10,600	4,850	2,565	18,015
Recruitment Expenses	427	0	0	427
Training Events & Workshops	14,065	17,326	27,639	59,030
Travel	4,657	16,351	4,570	25,578
				0
Total-Cash	116,638	214,826	189,252	520,715
EXPENDITURE-In Kind				
	7/04/2022	7/10/2022	31/03/2023	Total
Salaries	19,826	6,024	8,551	34,401
Audit				0
Communications & Promotions				0
Computer Equipment & Software				0
Contractors			30,800	30,800
Recruitment Expenses				0
Training Events & Workshops	9,433	6,050	3,400	18,883
Travel				0
Total In Kind	29,259	12,074	42,751	84,084
TOTAL PROJECT	145,897	226,900	232,003	604,799
Summary In Kind Contributions				
	7/04/2022	7/10/2022	31/03/2023	Total
University of the Sunshine Coast	29,259	12,074	11,951	53,284
RoboCoast	0	0	30,800	30,800
Total In Kind	29,259	12,074	42,751	84,084

CERTIFICATE

**CERTIFICATION BY UNIVERSITY OFFICER
UNIVERSITY OF THE SUNSHINE COAST
PROJECT NUMBER: NCIP11000141
FOR THE PERIOD: 07/11/2021 TO 31/03/2023**

We confirm that, to the best of our knowledge and believe, having made such enquiries as we considered necessary for the purpose of appropriately informing ourselves:

Statement of grant income and expenditure

a. We have fulfilled our responsibilities for the preparation of the statement of grant income and expenditure in accordance with the cash basis of accounting and the terms of the grant agreement with the Commonwealth, represented by the Department of Industry, Science, Energy and Resources dated 5 November 2021, in particular, the statement of grant income and expenditure presents fairly in accordance therewith.

b. All events subsequent to the date of the statement of grant income and expenditure which require adjustment or disclosure so as to present fairly the statement of grant income and expenditure, have been adjusted or disclosed.

c. [Where applicable] The effects of uncorrected misstatements are immaterial, both individually and in the aggregate, to the statement of grant income and expenditure as a whole. A list of the uncorrected misstatements is attached to this representation letter.

d. That all Grantee contributions and other financial assistance were spent for the purpose of the project and in accordance with the grant agreement and that the Grantee has complied with the grant agreement and relevant accounting policies.

e. That salaries and allowances paid to persons involved in the project are in accordance with any applicable award or agreement in force under any relevant law on industrial or workplace relations.

Signature: *Elizabeth Cannon*
Name: Elizabeth Cannon
Position: Chief Finance Officer
Date 31/05/2023



