

# Annual Report

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Dream Big Australia

**Financial Year 2019,  
Financial Year 2020 H1**

27<sup>th</sup> February 2020



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# About Us

Dream Big Australia is a not-for-profit organisation that provides the best science, technology, engineering, arts and mathematics (STEAM) experiences to young people.

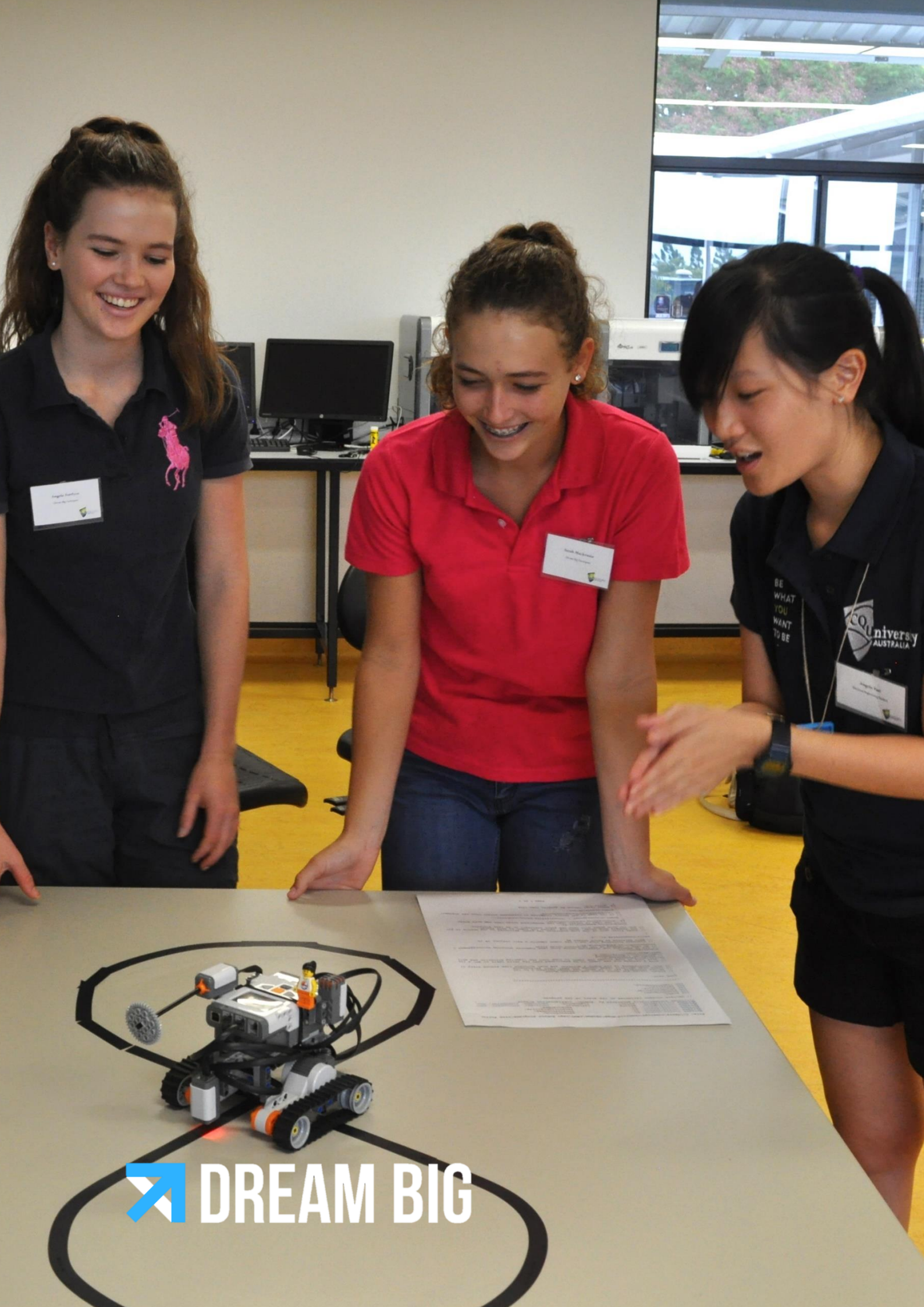
Our events focus on inspiring young people, particularly females, between 13 to 18 years old, by providing career advice and guided industry tours. This allows young people to get a taste of university and industry pathways, experience hands-on, curriculum-aligned activities and gain confidence to make informed decisions about subject selection and QTAC.

**OUR MOTTO IS:**

**“BRINGING INDUSTRY TO THE CLASSROOM”**







 DREAM BIG



## Vision

A STEAM education that engages and empowers young people to shape a better future for our world.

We achieve this by building greater connection between young people, education and industry with practical learning opportunities.

## Purpose

Dream Big provides the best science, technology, engineering, arts and mathematics (STEAM) experiences to young people so that they are empowered to become global leaders in education, industry and innovation

The purpose of every opportunity we facilitate is to add greater context and meaning to STEAM education so that our young people are better equipped with the necessary skills and knowledge they will need for their future.



# STEAM Focus

We believe the Arts have a critical role to play in Science, Technology, Engineering and Mathematics (STEM) education, encompassing the creative problem solving and human-centred design thinking that fuel our innovative responses to science, technology, engineering and maths problems.

Incorporating the 'Arts' into STEM to better achieve 21st century skills and maximise diversity is an exciting and natural addition. By bringing in the 'Arts' and using language like "creative problem solvers", we model inclusive language – which is far more likely to resonate with both men and women.

With our strategy, we provide young people with the necessary STEAM skills and knowledge for a successful future.

**STUDENTS WITH WELL-DEVELOPED SCIENCE, TECHNOLOGY, ENGINEERING, ARTS AND MATHEMATICS (STEAM) SKILLS HAVE BRIGHT EMPLOYMENT PROSPECTS.**





# Our Events

Our activities are developed to ignite our young people's passion for STEAM, develop their skills and knowledge and give them the opportunity to learn from, and connect with leaders in the industry.

Our event experiences are designed to not just to improve students' practical skills, but to spark their curiosity, engagement, participation and career aspirations.

Our Dream Big Events give young people the opportunity to develop their understanding of STEAM and the rewarding job prospects available in the profession while receiving advice from leading industry professionals.

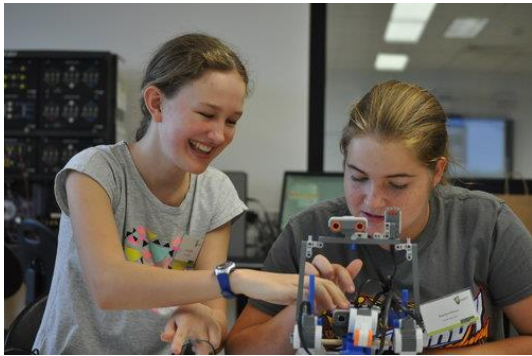
**"THE BEST ASPECT OF THE EXPERIENCE WAS "THE INSPIRATIONAL SPEECHES FROM GUEST SPEAKERS. I WAS ABLE TO LEARN ABOUT ENGINEERING AND I MADE NEW FRIENDS."  
(PAST STUDENT)**





# Our Program

Our events help increase students' ability, engagement, participation and aspiration in Science, Technology, Engineering, Arts and Mathematics (STEAM) careers.



## We provide:

- Free one-day events focused on inspiring young people, particularly females, between 13 to 18 years old
- Career advice from industry leaders
- Guided Industry tours

## Benefits to school students:

- Get a taste of university and industry pathways from career-focussed workshops
- Experience hands-on, curriculum-aligned activities
- Gain confidence to make informed decisions about subject selection and QTAC
- Gain valuable 21<sup>st</sup> century skills to prepare for professional life after study
- Discover and understand career pathways
- Build networks with like-minded students
- Get motivated to plan future career ambitions



 **DREAM BIG**



# The year in Review: Director's Report



**John Searls**  
Non-executive Director



**Sharyn Scriven**  
Non-executive Director

The Directors of Dream Big Australia are delighted to provide our inaugural Directors Report. 2019 will be remembered as a pivotal year for Dream Big Australia as it transitioned from the Dream Big Project to a fully-fledged registered not-for-profit company.

The year began with the formation of the initial board comprising of Sharyn Scriven, John Searls and our founder and Managing Director, Jessica Kahl. The year ended with Dream Big Australia on the world stage through Jessica Kahl's presentation at the World Engineering Conference in Melbourne.

The Board worked to reset the strategy and roadmap for 2019 and 2020. This journey consisted of several strategic choices including our transition from STEM to STEAM education, our geographical focus on young people aged 15-18 in Queensland, living our motto: "bringing industry to the classroom" and placing an emphasis on the 'Arts' by using inclusive language to maximise diversity at events.

We are particularly proud of the publication of Dream Big Australia's vision "A STEAM education that engages and empowers young people to shape a better future for our world."

Importantly, 2019 saw the implementation of the first set of partner agreements with Energy Queensland, and Institute of Public Works Australasia Queensland (IPWEAQ). We extend our sincere gratitude to all our partners as without them we would be unable to conduct the educational and empowering activities with students, nor take our message of Dream Big Australia to a broader audience through Round Tables and Conference presentations.

Throughout the year, Dream Big Australia worked with our partners to complete several successful activities including our Partnership Launch with Energy Queensland where we explored Future Energy concepts with year 10 students, our participation in the Department of State Development Breakfast, our





**Jessica Kahl**  
Managing Director

Partnership Launch with IPWEAQ, our mentoring and work experience program with university students, STEAM Day with The University of Queensland and our presentation at the World Engineers Convention.

To ensure all these activities could be conducted, the governing and support structure was rounded out, consisting of the creation of our 3+ year strategy, the creation of our Education Advisory Board and the formation of our event management team. Our Strategy is the first step in a program of action and impact. It will be supported by an implementation plan providing detailed work plans, including timetables, resources and targets.

After our first year of operation, we have sufficient funds available to support our continued outreach to Queensland. Our vision is to quickly move to a position where 70% of our partner investment contributes directly to our STEAM engagements with young people, particularly those in regional areas where students and schools have limited access to outreach programs. In our first year of operation, we focussed on investing in our base systems, processes and STEAM activity content, with 19.3% of our total expenditure achieving engagements with young people in Queensland. It is our objective to decrease expenditure not directly related to engagement as our company set-up costs decline.

The Directors are looking forward to 2020 which is shaping up as another growth year with the scheduling of numerous activities including outreach to CQUniversity Australia and The University of Queensland campuses, formalising our connection to Queensland.

Finally, we would like to thank all the volunteers who have played an active part in establishing and executing Dream Big Australia activities through 2019. We are enormously grateful to the staff, students, alumni and Board members who have so enthusiastically and generously given time to shaping our emerging strategy. Without our volunteers, much of the support we provide would not be possible.

Our thanks to you all for making the development of our strategy such a stimulating and exciting process.

*“Too often we give children answers to remember rather than problems to solve”*

**Roger Lewin**  
British Prize-winning Science Writer

# Technology

## BIG DATA

→ collecting information  
& processing  
about the cars route,  
destination, surroundings,  
weather conditions, etc

→ making  
algorithms  
for the car  
to make  
decisions

## IMPROVING PHYSICAL COMPONENTS



→ ba

- Community
- Efficiency

## Coding

ability to self learn  
off data.  
- navigation



# Our Story

Founded as the Dream Big Project in 2014 by then student and current Managing Director Jessica Kahl, the organisation transformed into Dream Big Australia in 2019 and is now focused on building a strong network of industry and education partnerships for the purpose of creating greater collaboration. Dream Big Australia promotes diversity of all types in STEAM, with a specific focus currently on female school students in Queensland.

# 2015

**DREAM BIG PROJECT**  
Foundation year

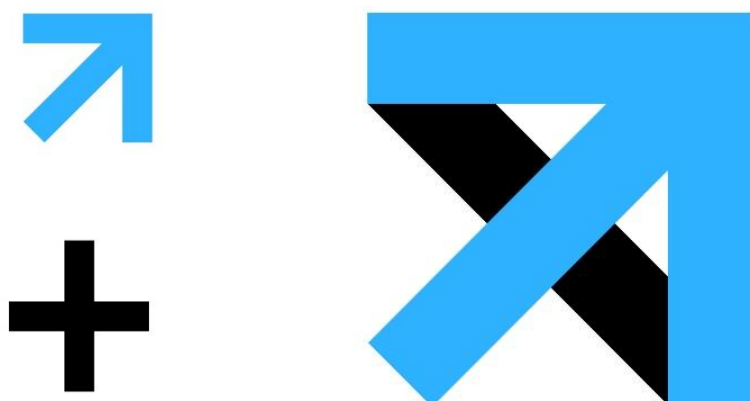
# 2019

**DREAM BIG AUSTRALIA**  
First year of operation as NFP

# Our Logo

Our logo combines the international male and female symbols, representing them together to form a sign of positive growth, inclusiveness and diversity.

We believe it is crucially important to recognise that a gender-equal society benefits everyone as 100% of talent will grow collaborative, inclusive and innovative teams. Influencing this fundamental change will require men and women to support and empower each other so we can move upwards together (hence the upwards arrow!).





# Our Impact

Since our formation in 2015 as the Dream Big Project, to our new status as a not-for-profit as Dream Big Australia, we have had the following impact:



**23+**

**FREE EVENTS**  
delivered across Queensland



**400+**

**STUDENTS**  
engaged across Queensland



**7**

**LOCATIONS**  
including Rockhampton, Gladstone,  
Bundaberg, Mackay, Cairns and Brisbane

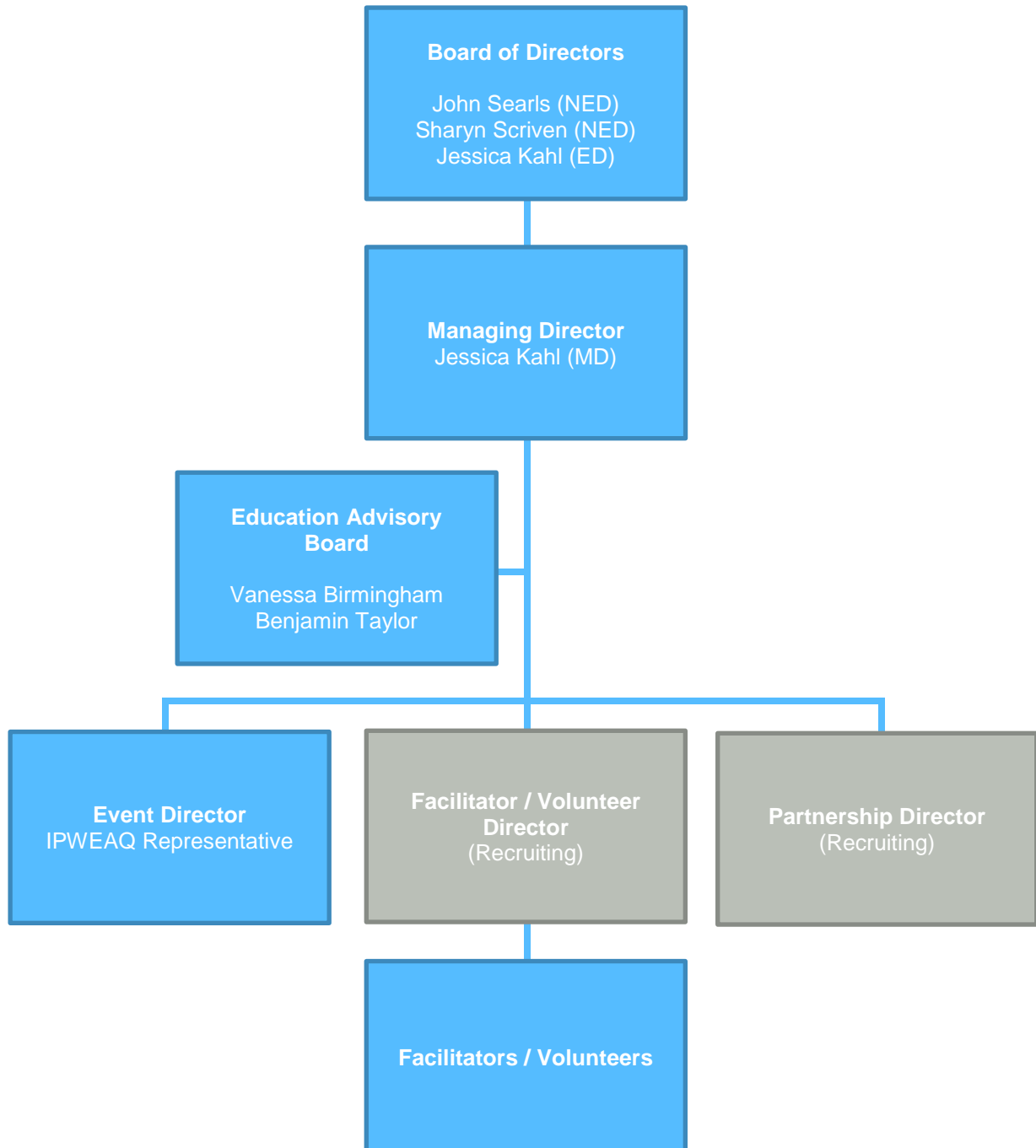


**84%**

**OF STUDENTS**  
who attended a Dream Big Event found the  
experience helpful in providing information  
about careers and going to university

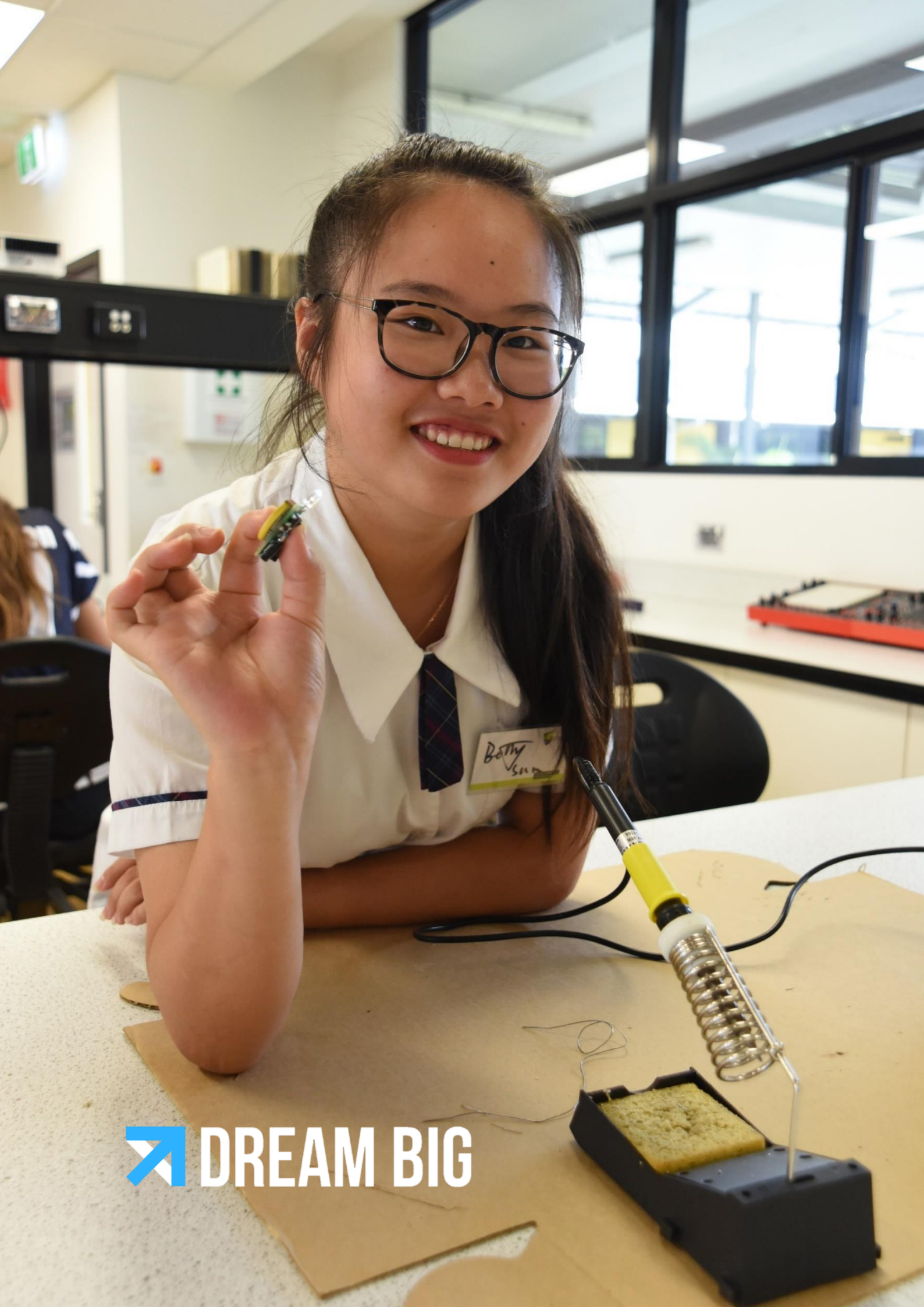
Thank you to our Partners and Volunteers for continued support. We are privileged to have you involved in giving back to the profession and community. Without you, much of the support we provide would not be possible.

# Governance & Organisation



**Abbreviations:**

- NED = Non-Executive Director
- ED = Executive Director
- MD = Managing Director



 **DREAM BIG**



# Leadership Team

Meet the Dream Big Australia leadership team. With a wealth of cross-industry experience, we are established professionals and leaders in our fields – with a shared commitment to differentiate the STEAM experience from industry to the classroom.



## Jessica Kahl

**MANAGING DIRECTOR & FOUNDER, DREAM BIG**

**CIVIL ENGINEER, AURECON**

Jessica Kahl is the Managing Director of Dream Big Australia and a Civil Engineer at Aurecon. Since entering the industry in 2013, Jessica has combined her creative leadership and engineering capabilities to make a difference to society through master planning, resources and infrastructure. Outside of her day job, she is passionate about increasing engagement and growth in STEAM to empower education, industry and innovation. Jessica works closely with investment and collaborative partners, education institutions and students to guide positive outcomes which integrate STEAM learning and storytelling from industry leaders into engaging Dream Big Events.



## Sharyn Scriven

**NON-EXECUTIVE DIRECTOR & CHAIR, DREAM BIG**

**GENERAL MANAGER ASSET PORTFOLIO OPTIMISATION, ENERGY QUEENSLAND**

Sharyn Scriven is a Director and Chair of Dream Big Australia and is the General Manager Asset Portfolio Optimisation at Energy Queensland. For the past 25 years Sharyn has worked in large engineering-based utility businesses that have undergone significant evolutionary change. Sharyn has extensive experience in developing strategy, delivering results and managing risk. In leading and embedding transformational change across large teams to build capability and drive efficiency, Sharyn has delivered exceptional business outcomes. Sharyn is MBA qualified, MCIPs accredited and was awarded Asia Pacific Chief Procurement Officer of the Year 2012.



## John Searls

**NON-EXECUTIVE DIRECTOR, DREAM BIG**

**GLOBAL LEAD, ENVIRONMENT & PLANNING,  
ADVISORY, AURECON**

John Searls is a Director of Dream Big Australia and the global lead of Aurecon's Environment and Planning Advisory business. With more than 25 years of experience leading transformational change at both the strategic and operations levels, he challenges the status quo, specialising initiatives that design and drive fundamental change across the asset intensive industry. He is passionate about supporting business to achieve financially, socially and environmentally sustainable investment outcomes, not only during the formation stages, but right through an assets lifecycle and eventual transformation or closure. He is also an active leader of inclusion and diversity. "Gender diversity is only one form of diversity, but a very important one for me. I have two daughters that deserve the opportunity to pursue any vocation that matches their strengths, without discrimination. And I have a son who deserves to benefit from a world rich in diversity".

# Education Advisory Board

Our Education Advisory Board brings together Science and Mathematics school teachers, university lecturers and experienced industry professionals to develop STEAM activities. The activities are designed to align with curriculum including the ACARA and QCAA and current industry practice and promote young people's participation, ability and aspiration in STEAM careers. These STEAM activities are tested with our Partners and delivered at Dream Big Events.

To achieve our vision, we must uphold our commitment to providing the best STEAM experiences to young people in Queensland in all that we do. The collaboration between our Leadership Team and the Education Advisory Board is our declaration of strategic intent to ensure we exemplify our motto of "bringing industry to the classroom".



## Vanessa Birmingham

**EDUCATION ADVISORY BOARD MEMBER, DREAM BIG**

**SCIENCE / BIOLOGY / PSYCHOLOGY TEACHER, ST PETERS LUTHERAN COLLEGE**

I have been a High School Science teacher for 10 years. Teaching 8-10 Science, Senior Biology, Psychology and Science21. I also teach a subject called Theory of Knowledge which looks at the how knowledge is formed and how we can use it; basically, a critical thinking subject. Prior to teaching I dabbled briefly in research but found my passion in Education. I have a BSc in Biomedical Science and am currently studying towards my Masters in Education focusing on STEM education. I absolutely love helping students find a love for science and finding opportunities outside of the school environment for them to pursue their passions. I have been particularly focused on girls in STEAM and opening up their minds to careers in STEAM. In a school setting I look at embedding STEAM skills into the curriculum in my role as a Curriculum Assistant. My role in Dream Big Australia is to look at linking Dream Big programs and activities with the current curriculum content and skills across 7-12.





## Benjamin Taylor

**EDUCATION ADVISORY BOARD MEMBER, DREAM BIG**

**DISCIPLINE LEADER (FOUNDATION ENGINEERING STUDIES), CQUNIVERSITY AUSTRALIA**

Dr Benjamin Taylor is a Senior Lecturer in Engineering at CQUniversity with a PhD in water resources management. As the Foundation Studies Discipline Leader, Ben oversees the delivery of engineering units for students studying in Cairns, Mackay, Rockhampton, Gladstone, Bundaberg and via Distance. Ben has worked with Engineers Without Borders and encouraged many students to embark on humanitarian engineering trips throughout Australasia. Ben is also the coordinator of the CQUni Youth STEM Academy. The academy cultivates aspirations and support for tertiary education through its community of young STEM leaders comprising high school STEM Ambassadors and undergraduate School Liaison Officers, together with Academics and their associates.



# Volunteers

Our volunteer positions offer university students and industry professionals the opportunity to work with our amazing 'Dream Team', share their passion, and inspire the next generation of STEAM leaders. Our volunteers are involved in the project management of events, facilitation of workshops and industry site tours, and presentations at industry, university and school-based events across Queensland – they are passionate about creating real change!

Our volunteers are also our ambassadors – their ability to talk knowledgably and passionately about the benefits STEAM careers and of being part of Dream Big Australia makes a huge difference to our future success. We are privileged to have so many university students and industry professionals want to give back to the profession and community as a Dream Big Australia volunteer. Without our volunteers, much of the support we provide would not be possible.



## Brittany Harris

**VOLUNTEER, DREAM BIG**

**CIVIL ENGINEER, AURECON**

Brittany is Civil Engineer professional working at Aurecon with experience in the aviation sector delivering major infrastructure projects across design, construction and project management. As a Dream Big volunteer, Brittany assists in engagement and co-mentoring students in the planning of events as she believes in contributing to the overall vision for greater STEAM involvement. Her key interests include flying her drone, advocating for women in engineering and creative activities.



## Tara Searls

**VOLUNTEER, DREAM BIG**

**DIRECTOR & PHOTOGRAPHER OF APPLÉGUM STUDIOS**

Tara Searls is Director/ Photographer of Applegum Studios, a boutique photography studio that specialises in corporate and family imagery. Tara is a passionate multidisciplinary photographer who on one hand works with professional people on creating their personal brand and corporate image, and on the other spends time capturing families and their emotional connection. As a mother of 3 creative and inquisitive teenagers, she is an enthusiastic supporter of Dream Big Australia and its educational initiatives.



## **Matt Soucie**

**VOLUNTEER, DREAM BIG**

**DIRECTOR, FORGE DESIGN**

Matt is an independent consultant providing engineering and management services to companies developing new technologies. His industry experience includes manufacturing, chemical processes, oil & gas, and alternative fuels. As an engineer, Matt has an innate curiosity of the world around him, how things work, why they break, and how to improve them through a combination of systematic and playful design. Matt brings his MBA finance and accounting skills in addition to 16 years of engineering experience to the Dream Big Australia team. He believes that millions of powerful ideas can be unleashed by opening channels to share knowledge.



## **Gabrielle Lee**

**VOLUNTEER, DREAM BIG**

**IT RELATIONSHIPS ADVISOR, QSUPER**

Gabrielle is an IT Relationships Advisor with experience in procurement and supply chain in both Government and Financial Services Industries. She uses her IT and Business Backgrounds to facilitate tenders, manage vendors and negotiate commercial agreements. As a volunteer for Dream Big she assists in reviewing partnership proposals, grant applications and conference presentations. Her key interests include avocado on toast, managing her investment portfolio and pilates.





## Abby Carolan

**VOLUNTEER, DREAM BIG**

**WATER INFRASTRUCTURE TEAM LEAD, AECOM**

Abby Carolan is a Senior Civil Engineer and Water Infrastructure Team Lead at AECOM, Rockhampton. Abby leads teams in the design of a range of civil infrastructure projects including water, sewer, drainage, earthworks and roads that support the growth of local communities. This role enables Abby to work collaboratively, solve problems and be creative everyday. Abby has a passion driving excellence in the next generation of engineers through mentoring and involvement initiatives that focus on diversity in the industry such as Dream Big Australia.



## Jessica Edwards

**VOLUNTEER, DREAM BIG**

**AREA ASSET OFFICER, ERGON ENERGY**

Jessica Edwards is a volunteer with Dream Big Australia and an Area Asset Officer at Energy Queensland. Starting a traineeship in the industry in 2011, She has since completed a Certificate IV in Electricity Supply Industry – Power Systems and a Bachelor of Engineering Science (Power), while holding a range of roles in Electrical Design, Asset Management and Network Planning. Completing her studies while working in the industry has allowed Jessica to develop a diverse range of technical, leadership and communication skills. During her career, she has become increasingly interested in providing support to students interested in STEAM careers to encourage growth and change to the industry.



## Jessica Dennien

**VOLUNTEER, DREAM BIG**

**DESIGN ENGINEER, GLADSTOONE REGIONAL COUNCIL**

Jessica Dennien is a Civil Design Engineer at Gladstone Regional Council. Jessica has always had a keen eye for how the world works and a passion for making things beautiful whilst also working to their optimum. In grade 12 Jessica's Graphics teacher told her that she would make a fantastic engineer. It was then that she applied for her engineering degree at CQUniversity. During her 7 years with Gladstone Regional Council, her passion for making her region better combined with her creativity and engineering capabilities, has allowed her to make a positive impact on her community through designing various infrastructure from roads and drainage to parks and other public spaces. Jessica has always been passionate about promoting careers in STEAM and is excited to be volunteering to help educate young people.



Rebecca Agius, Phoebe Bickell, Jessica Kahl, Abby Carolan and Brittany Harris

# Our Strategy

Having completed the Dream Big Australia Strategy, we will quickly move on to implementation. A detailed implementation plan will be prepared during the next 3 months and work will begin on delivering our objectives and initiatives. This is an ambitious strategy will require a sustained effort - we will achieve our goals through a steady, carefully planned and concentrated process.

**2019**  
H1

**2020**  
H2

## Transition from NFP Company and set growth agenda

- Complete Board (moving from university project to not-for-profit organisation)
- Build social media presence
- Achieve 1-2 Investment partners for 2020
- Achieve 2 Collaborative Partners for 2020
- Recruit Facilitator Leader
- Run STEAM event with UQ
- Develop [website](#)
- Develop Event Management capability

## Cement position as Queensland's No. 1 partner for promoting STEAM

- Recruit and train facilitators
- Run 3+ Dream Big Events in Queensland
- Achieve 3 Collaborative Partners
- Achieve 5+ Investment partners for 2020
- Build social media presence
- Share success stories
- Set-up Queensland-wide committee
- Meet with Queensland Education Minister



# Our Commitment

Dream Big Australia is excited about the next 12 months and are confident we can move towards our vision of shaping a better future for our world through STEAM education. Moving into 2020, we are cementing our position as Queensland's number one provider for promoting STEAM.

# 1

## Increasing engagement

Living our motto: “bringing industry to the classroom” is paramount to everything we do, it reflects our everyday actions in creating the ‘Dream Big’ impact. We are passionate about increasing young people’s participation, ability and aspiration in STEAM careers – and maximising diversity in everything we do. Through our events, we increase engagement and exposure to domestic school students choosing QTAC preferences, making school students more aware of career pathways and opportunities in STEAM from the experiences they gain at events.

# 2

## STEAM focus

In 2019, Dream Big Australia made several strategic choices, including our transition from STEM to STEAM education in event delivery. This has now expanded to how we develop activities, where we place an emphasis on the ‘Arts’ in developing STEAM content. Incorporating the arts into STEM to better achieve 21st century skills and maximise diversity is an exciting and natural addition. By bringing in the ‘Arts’ and using language like “creative problem solvers”, we model inclusive language – which is far more likely to resonate with both men and women. Brining in the A is also important for future proofing skills of the next generation. STEM roles in Australia and globally may be disrupted through the likes of artificial intelligence (AI), however the one thing AI can’t replace is empathy. Empathy is a human centric skill and is closely linked to the Arts.

# 3

## Industry partnerships

Moving into 2020, we are looking to work with other great organisations in Queensland who share our ethos and can collaborate with us in achieving our strategic goals. Growing our Partnerships in 2020 is significantly important as this allows us to remain focussed on increasing engagement with STEAM and improving employability prospects. We involve our industry partners in presentations and guided industry tours to provide a practical experiences and role models from STEAM careers. Growth from our investment partners means that we can continue to provide our events at no cost to students or schools, especially in regional areas where schools often have the least STEAM outreach programs available.

# 4

## Geographical outreach

We have a strong geographical focus on young people aged 15-18 in Queensland. Our continued engagement with CQUniversity Australia and The University of Queensland will allow our events to have greater outreach and impact on students’ engagement in STEAM careers and to industry employers. We are excited to be working with esteemed staff and academics at these institutions. Our ongoing investments in our relationships with education institutions are paramount to differentiating Dream Big Australia and delivering greater outreach to young people in Queensland. These relationships are the basis of our Collaborative Partnership agreements. As a not-for-profit organisation, collaborative partnerships allow us to sustainably grow the number of events we provide in Queensland.

5

### Expanding our volunteer program

We are providing more opportunities to university students and industry professionals to volunteer at our events as we grow in 2020. Through our online Learning Hub, we recruit and train our volunteers in facilitation, engagement and presenting with influence. Our online videos and content developed allows us to engage volunteers in regional Queensland and help in up-skilling them to empower young people. Our volunteers are involved in the project management of events, facilitation of workshops and industry site tours, and presentations at industry, university and school-based events across Queensland – they are passionate about creating real change!

6

### Improving representation of women in STEAM

Our events improve the representation of women through role models and engagement with industry professionals. A focus on the 'Arts' improves student motivations, particularly females, for engagement with STEAM as it directly links the activity to a purpose. By using language such as 'creative thinking', 'collaboration' and 'problem solving' we create an environment which where female students are attracted to our events. We address gender bias in our events by placing a greater emphasis on STEAM skills and by using language which is strategically inclusive and attractive for men and women – proving that by focussing on collaborative and inclusive skills, we indirectly inspire women into these fields. Through our partnership with IPWEAQ, our event management processes track event participation of gender and ethnicity and measure our socioeconomic outcomes.

7

### In-demand undergraduates

Dream Big Australia is passionate about improving school student's engagement with STEAM careers and enhancing the employability of undergraduates who volunteer. By providing experiences for school students and undergraduates to get involved in our events, we optimally prepare them for the opportunities and challenges of the 21st century global workplace. Long term, we intend to build an ambitious program connecting our talent pipeline of all students involved with employability prospects.

8

### Excellence in education

Excellent delivery of context at our events is the foundation of our vision and purpose. Our Education Advisory Board was created to bring together Science and Mathematics school teachers, university lecturers and experienced industry professionals to develop STEAM activities. By working with leading professionals, we develop activities aligning with curriculum including the ACARA and QCAA and current industry practice to improve educational quality and the student experience.

9

### Event management

Our partnership with IPWEAQ enables Dream Big Australia to streamline event delivery with EventsAir and professionals specialising in event management, resulting in improved market research and insights to ensure future students engagement is targeted, meaningful, and effective.



**DREAM BIG**



# Partnership Launch with Ergon Energy Network

To celebrate our partnership with Ergon Energy Network and Energex, which are part of Energy Queensland, we hosted a Future Energy event at Energex's Eagle Farm Distribution Centre to inspire female school students through "wicked" problems and mentoring. The event included a Design Thinking workshop where we explored what the future of the energy sector would look like in 20+ years' time and explored Energex's facilities, including a special visit to the Tesla batteries at the Smart Energy Education House.

The Brisbane-based event was themed around the Government's 2030 renewable target and gave the students an opportunity to experience design thinking with respect to the future of 'Energy' and 'Sustainability'. The students were exposed to informative discussions about the changing face of energy including the importance of renewables in our future.

After hearing from Energy Queensland Board Director Kerryn Newton and Managing Director, Jessica Kahl, the students understood the benefits from being in a STEAM career – from making a meaningful impact to the opportunities to travel around the world – the excitement about the future of STEAM was shared.

The students also heard from graduates Alice Fleetwood and Candice Horig who inspired them and explained that a career pathway in STEAM is not linear. The events have become an engaging platform to support student exposure and empowering experiences to increase their aspiration and participation in STEAM, and ultimately dream big!



# Department of State Development Breakfast

For International Women's Day, Dream Big Australia featured on stage at the Department of State Development's Women in Manufacturing Breakfast. Sharing the microphone with our Managing Director, Jessica Kahl was Rachael Armistead, Supply Chain and Operations Director at Hyne Timber, Mel Ireland, Member Executive at Ai Group and Mark Muller, Asia Pacific Director of Finance at Cook Medical.

The panellists explored Queensland manufacturer's ability to innovate and the importance for women to become a part of the new highly skilled occupations that are required for the future, and how to encourage and support new entrants into this evolving sector.

With the manufacturing sector playing a vital in growing and diversifying Queensland's economy, the talent pipeline of our next generation is crucial for creating future career pathways, especially recognising that gender diversity in the workforce drives innovation and idea generation.

The panel shared their tips and tricks for attracting highly skilled women into the sector will be increasingly important to its success. These tips included embedding flexible working into the workplace, creating a collaborative and position workplace environment where culture is key, having mentors and a good network to support you and giving constructive feedback.



**Jessica Kahl at the Queensland Government's Women in Manufacturing Breakfast with Kelvin Grove students**





## Women in Manufacturing

*Recognising the role of women in the future of Queensland manufacturing*



 **DREAM BIG**



# Our Partnership with IPWEAQ

We are excited to announce that Dream Big Australia has partnered with IPWEA Queensland (IPWEAQ) to co-create more engaging events for young people looking to pursue careers in STEAM. The Partnership represents our invested interests on increasing young people's engagement and exposure to STEAM study pathways and careers. Our partnership enables Dream Big Australia to streamline event delivery with EventsAir and professionals specialising in event management resulting in improved market research and insights to ensure future students engagement is targeted, meaningful, and effective.



**Leigh Cunningham**  
Chief Executive Officer, IPWEAQ

As the state's peak industry association, the mission at IPWEAQ is to create a vibrant, vital, supportive community for those engaged in the public works sector. We believe this starts from igniting the dream and potential within high schools where our future generations are found.

We are proud to partner with Dream Big Australia having seen the benefits and results of this program firsthand. We support the role Dream Big Australia plays in encouraging girls in high school to consider engineering as an exciting and rewarding career path. Society benefits when men and women are involved equally in leadership roles and we encourage more women to enter our sector to contribute their thoughts and ideas for the greater good.



**John Searls, Jessica Kahl, Leigh Cunningham and Nadia Marks signing the MOU**

# Women in Engineering and IT Symposium

The WiEIT Symposium was a collective effort from Australia's leading universities and industry organisations to address the "17%" of women in STEM fields – a percentage which has remained within this range for 3 decades now.

Hosted by University of Technology Sydney & UNSW, the National symposium brought together universities, industry organisations, students and educators from across Australia working towards increasing the participation of women in STEM degrees, particularly engineering.

With the aim to address the diversity problem as a collective network, the group worked together over the two symposium days to develop collaborative initiatives and actions for key themes: Culture, Outreach, Redefining STEM, Professional Development, Industry & Workplace and Evaluation & Data.

Jessica Kahl was sponsored by Aurecon to attend the Symposium and was fortunate to present about the benefits of having flexible working policies, leadership initiatives, shared care programs, diversity programs which recognise and support women's success and strategies to engage secondary school students in STEAM-related engagements.

There were many tangible takeaways from the symposium. From "we achieve more when we hold hands" to "you can't be what you can't see". As the Symposium came to a close, everyone in attendance formed 'working groups' to ensure we all committed to driving change to tackle the key themes developed. Although there's a big road ahead to see the impact from the key themes, one of the Symposium keynote speakers, Prof. Andrew Parfitt from UTS provided some insightful word of wisdom: "to do the hard things, you have to ask yourself 'Does it Hurt Enough?'"





# Our collaboration with the University of Queensland

The University of Queensland (UQ) and Dream Big Australia teamed up to host Australia's first STEAM Day on 27<sup>th</sup> November 2019. The collaboration involved university students from UQ completing 12 weeks of work experience with Dream Big Australia to plan and deliver an interactive workshop designed to ignite students' engagement, passion and excitement about Science Technology Engineering, Arts and Mathematics (STEAM) fields.

School students from across Brisbane who participated in the event had the opportunity to connect with industry professionals and current university students which helped them develop their ability and aspirations for the future. The school students also gained an "industry to classroom experience" about STEAM-related fields and what the pathways can offer for their future.

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CREATE CHANGE

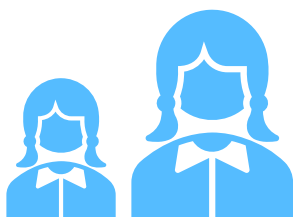


STEAM Day participants at the University of Queensland





## Representing women in STEAM



When organising STEAM Day, we promoted the event using inclusive wording to the catchment of Brisbane-based schools, inviting both males and females. By using inclusive language to maximise diversity, this resulted in only female school students attending the event.

When we asked the students why, the students explained that in contrast to 'STEM', they found STEAM engagement to allow them to express their more of their imagination and creativity.

# About STEAM Day



**Geoff Walton**

Work Integrated Learning Adviser,  
University of Queensland



CREATE CHANGE

STEAM Day at the University of Queensland was a fabulous credit to our exceptional UQ student partners, the energised school students who value STEAM and of course Dream Big, including the collaborating allies IPWEAQ and Energy Queensland, who provided the commitment and belief that engages our young, emerging and creative STEAM industry professionals.

The opportunity to collaborate with Dream Big Australia was made very easy after Jessica shared the vision for student centred collaboration and her commitment to a STEAM future that valued the Arts for using its inquiry and problem-based learning methods in the creative process.

I was fortunate to have access to enthusiastic UQ students from a range of courses and study areas who came together under Jessica's mentorship to make STEAM Day a success. Their energy, openness and willingness to step up and beyond was outstanding and I know that they will be successful in their futures.

Our students are the emerging leaders who will help shape tomorrow's world and create change.

The University of Queensland is excited to have had this opportunity to collaborate with Dream Big and we look forward to exploring how we can continue engaging tomorrow's STEAM professionals whilst we assist our exceptional UQ students build their employability through the innovative connection with Dream Big Australia.



Geoff Walton speaking to students about university pathways

## Our 'Dream Team' for STEAM Day

Dream Big Australia's purpose and passion is to see young people increase their participation, ability and aspiration in STEAM careers. In 2019, we did this by collaborating with The University of Queensland and 3 of their current students over 12-weeks of work experience and mentoring to design and delivery Australia's first 'STEAM Day'. This glimpse of what STEAM Day entailed is brought to you by Jessica MacDonald, Fransiska and Andres.



**Jessica MacDonald**  
Bachelor of Arts  
(Communication and Journalism)



**Fransiska Bekt**  
Bachelor of Civil Engineering (Hons) &  
Bachelor of Arts (Geography)



**Andres Hincapie Carvajal**  
Bachelor of Social Science  
(Development)

## Why did you get involved?



Exposing students to real industry challenges before entering University made me really interested in getting involved with the event. From my personal experience, exposing myself to these kinds of activities really helped me figure out where I wanted to go with my studies and my career. As someone who spent years trying to figure out where I wanted to go with my life, I wish I had had exposure to events like STEAM Day when I was in high school.



Ever since doing my double degree in Engineering and Arts, I have always been on the lookout for an experience that can utilise both my technical and problem-solving skills, as well as my more creative side (if you know a better way to say this, please help). The word STEAM pretty much sold it to me. I heard the term being used a few years back but had never encountered it again until I saw the ad for this event. I was beyond excited to get involved!



Curiously, I would have never imagined pursuing this particular opportunity with Dream Big Australia – I ended up getting involved because one of my friends in the Faculty of Humanities & Social Sciences recommended me to Geoff Walton (the man who offered me the opportunity). After Geoff proposed the significance of the role to me I was immediately on board! I put a lot of emphasis into occupying my time with plenty of activities; but the opportunity to put use of my skills towards positive social change was simply too overwhelmingly great.





Speed networking with school teachers, university students and industry leaders

### What were your initial thoughts of the program?



The first time I met Fran and Andre I was apprehensive about how we would work together as we came from such varying backgrounds of study. I was also a little intimidated! At university I had never had the opportunity to work with any students other than the ones in my degree and I was interested to see how well we would work together.



I honestly had no expectations for this program and naively thought that this experience would be similar to working with other engineers and scientists. Little did I know that I was very wrong (in the best of ways). Andres and Jess made me look at problems in a lot of other ways - which was something that I found right from our very first meeting. When discussing ideas for STEAM day activities, we had totally different thoughts and started to venture on different paths. But I found that our differences made the whole experience a whole lot more fun and thought-provoking.



To me, working with the diverse team I had gave me a lot of insights into different thought processes of different backgrounds – I had the pleasure of being surrounded by engineers, which provided an incredibly scientific and tangible contrast to my more sociology-based ideas and thoughts. I would not have known it back when I began, but this opportunity with DreamBig Australia came to expand my horizons in terms of building ideas and considering different points of view.

## What was one of the things that you learned when putting together the event?



The biggest thing that I gained from working on the event was the ability to work with people from different backgrounds and with different skill sets. Where one of us lacked, the other lifted us up. This could be seen clearly in many challenges we faced as a group.



There's no such thing as over-preparation! I thought that we had prepared a lot of things leading up to the event (flyers, invitations, catering, etc), but as it turns out: a few small things were forgotten in the midst of all the excitement. Luckily, Jessica (and the rest of the Dream Big team) came through and saved the day.



One of the most inspirational things that came from the Dream Big Australia experience definitely found itself in the hands-on experience of project management in the workplace. Though difficult at first, jumping into 'real-world' skills not only provided me with a tremendously useful toolkit for my future, but it provided some insight into what I would like to do in my professional future (I now believe I would love pursuing project management as a career choice).







 **DREAM BIG**



### What did you get out of the event itself?



Watching the event we had been planning for the last 4 months play out was extremely rewarding. Aside from intense relief that we had pulled it all off, I feel like we met our goal of successfully aligning the students to work together from different disciplines.



I absolutely loved the event! I felt a great sense of achievement and humility as I watched everyone fully engaging with the activities that we have helped develop. It was even better to see their interest in STEAM grow as the day progressed on - especially as the panellists talked about the future of autonomous vehicles. The whole event reminded me that I should not be afraid to think and dream big.



## From all of this, how important do you think is STEAM for our future?



Science, Technology, Engineering, Arts and Mathematics (STEAM) touches every aspect of our lives from smartphones to the technologies that send us to outer space. Engaging in STEAM education ensures that young people are critical thinkers, not just passive consumers. Additionally, getting students involved in STEAM events and exposing them to industry experience is essential to put them on the right path moving forward with their studies and careers.



Thinking through current and future world issues through a holistic viewpoint is really important. This is because we want to make sure that we provide solutions that address and include as many people as possible - regardless of status, education, physical abilities and backgrounds, whilst still meeting design standards and maintaining a high degree of efficiency. Our society is made up of various people from all walks of life and we should strive to have industries that reflect this.



Before participating in the Dream Big Australia experience I must admit I was not fully aware of the STEAM concept! I came to find it very useful and inclusive. I would hold high hopes for the near and far future of STEAM – as I mentioned above, there is an utmost importance to acknowledging multi- and inter- disciplinary practices, as well as holistic approaches to modern issues, we must ensure that the solutions we provide to society are carefully planned and meticulously applied with the consideration and approval of experts in all fields.



Fun photo following the industry panel discussion about autonomous vehicles



# An industry perspective



**Robert Wilson**

Development Manager, Ergon Energy Network, Ergon Energy Network



Part of Energy Queensland

The STEAM concept provides a great opportunity to take real world issues or problems to be illustrated by industry practitioners. Students are able to appreciate how some of the seemingly simplest issues to resolve have broad ramifications that need to be explored, understood and dealt with if they are to be successfully managed. I believe the exposure STEAM gave to students at the event I attended expanded their horizons as to how industries work and inter-relate and how they can shape their futures. It was a pleasure to present at the autonomous vehicle event and get a fresh perspective from a cohort of students as to their views on the impacts of autonomous vehicles. Congratulations to STEAM.



**Craig Moss**

Director, Institute of Public Works Australasia QLD



The 2019 STEAM Day event was an opportunity to put our partnership with Dream Big Australia into action, which is to bring industry to the classroom. The collaboration between Dream Big Australia, The University of Queensland, Energy Queensland and IPWEAQ is significant because it reflects the importance of having synergy between high school education, tertiary studies and real-world application of learning. This collaborative model is one we hope to replicate across many locations in Queensland so that students entering their final years of secondary education can have a greater appreciation of the career opportunities across science, technology, engineering, arts and math.

The purpose of IPWEAQ is to enhance the quality of life for all Queensland communities by advancing the skills, knowledge and resources available to those involved in the planning and provision of public works and services. For individuals, a career in public works is rewarding, varied and impactful. For communities, it is essential to have a talented and diverse pipeline of professionals on the horizon to meet the needs of our changing population and the way we live our lives. For these reasons, we value our contribution towards Dream Big Australia's mission and the positive influence we may have on the next generation of public works professionals.





**Marion Lawie**

Associate, Engagement Plus



Facilitating the STEAM workshop was educational. As experienced as I am working with students, industry and academia, the high school pupils attending the session really gave me pause to think. We designed the workshop to guide students through industry-led exposure to the current state of autonomous vehicles to then consider the future and what actions may be taken to maximise the benefits of AVs. I was really impressed by the broad ranging insights of the participants. They recognised the criticality of skills and values such as teamwork and empathy, giving them equal weight to the 'harder' skills of STEAM. They also deeply explored the ethical implications of AV, demonstrating exceptional recognition of their stewardship role as future potentials become daily realities.

As the students considered the practical contributions that STEAM professions could make across the span of AV implementation, they confirmed at every turn the essential interweavings of these different disciplines. We really do need a combination of strengths and skills to create our best futures and I'm confident that we have exactly that in these uni and high school students. What a pleasure to be part of it!



# AGENDA

- Introductions
- Dream Big Australia
- University of Queensland
- Housekeeping
- Safety moment
- Panel discussion about autonomous vehicles
- Design thinking workshop

STEAM DAY  
UNIVERSITY OF QUEENSLAND

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# World Engineers Convention

Bringing in the A into STEM is important for future proofing skills in engineering as roles are being disrupted through the likes of AI. However, the one thing AI can't replace is empathy as it is a human centric skill. By bringing in the 'A' for Arts and using language like "creative problem solvers" it encourages the use of inclusive language, which is far more likely to resonate with both men and women. This approach also ensures that there's a greater focus on skills, rather than minorities and gender. The awareness of STEAM skills is an approach we actively promote when running Dream Big Events and an approach we wanted to share with the broader industry – little did we realise it would be on the world stage.

On the 20<sup>th</sup> of November 2019, Dream Big Australia presented at the World Engineers Convention about 'The next generation of STEAM leaders'. Our presentation provided insight into how our Dream Big Events are increasing the participation, ability and aspiration of young people by bringing the Arts into STEM - making it STEAM.

In our 15-minute presentation, our Managing Director, Jessica Kahl demystified why we talk about the terms STEM and STEAM, spoke about the importance of growing young people's "21<sup>st</sup> century skills" and explained how our collaborative approach with industry and education providers helps to increase participation, ability and aspiration of our next generation of STEAM leaders.

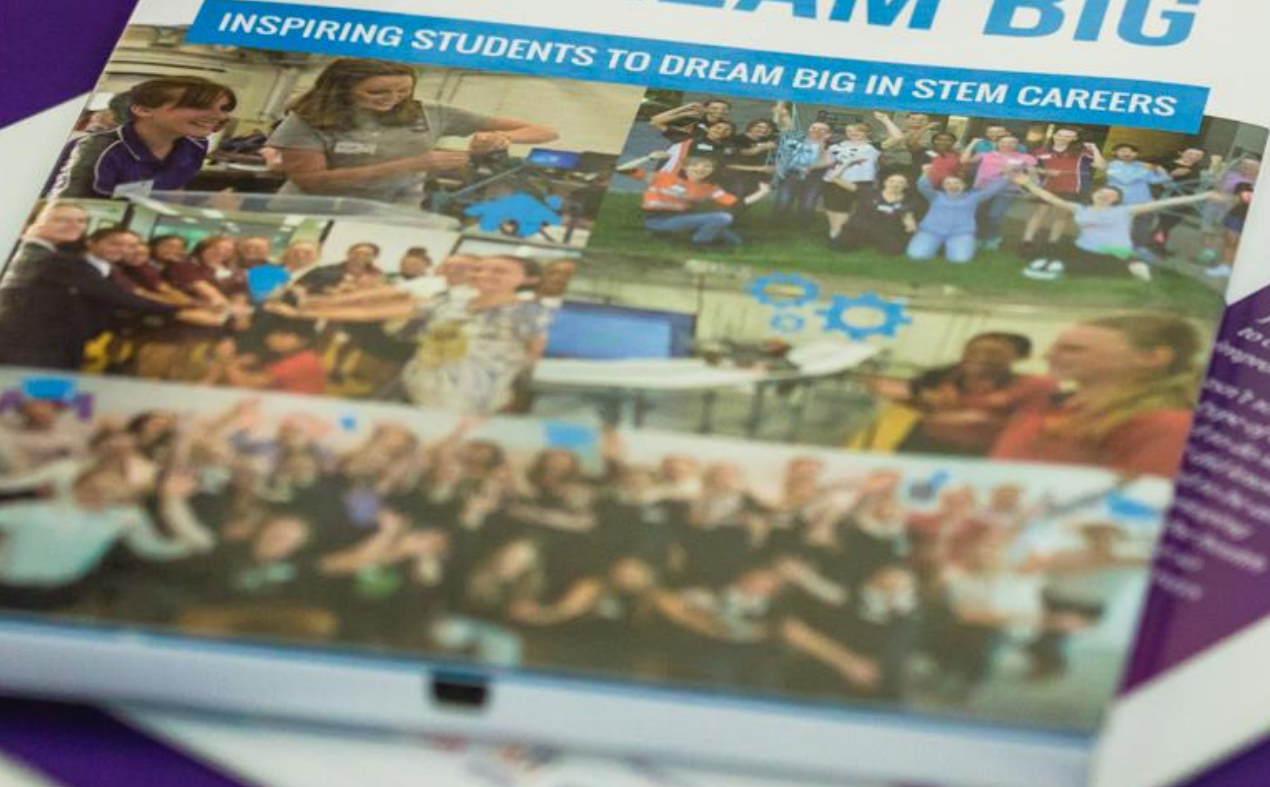


Jessica Kahl presenting at the World Engineers Conference in Melbourne



# DREAM BIG

INSPIRING STUDENTS TO DREAM BIG IN STEM CAREERS



## UQ Women in Engineering

...in Engineering  
...career in  
...industry

*"I have wanted to be an engineer since I was about 8 years old. I always remember exactly what made me realise the potential of technology. I just have always wanted to create things that would improve quality of life."*



# Partner Program

Partnerships are critically important to the ongoing, successful delivery of our events which focus on inspiring young people, particularly females, between 13 to 18 years old, by providing career advice and guided industry tours. This allows young people to get a taste of university and industry pathways, experience hands-on, curriculum-aligned activities and gain confidence to make informed decisions about subject selection and QTAC.

Partnership growth is significantly important as this allows us to continue to provide our events at no cost to students or schools, especially in regional areas where schools often have the least STEAM outreach programs available. It also allows us to remain focussed on increasing engagement with STEAM and improving employability prospects.

We measure the impact of our program on young people with a focus on maximising diversity by tracking event participation of gender and ethnicity, understanding market research from surveys and gaining insights to ensure future students engagement is targeted, meaningful, and effective.

We have been recognised for our work with the CQUniversity Opal Award for Engaged Service Learning and Excellence and received a 'High Commendation' under the Engineers Australia Gender Diversity Awards in 2015.

For information about our Partnership Program, refer to our website [here](#).



## GOLD PARTNERS\*



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## COLLABORATIVE PARTNERS



## SUPPORTERS



Foundation Supporter



\* Dream Big Australia is a registered charity. While that does not automatically make donations to us tax deductible, certain tax payers may nonetheless conclude that they are entitled to a deduction based on expected benefits of giving to their business. Potential business benefits that can arise from giving include: early talent identification, employee engagement and morale, market profile and reputation, positive social media, connections and networking. We encourage our partner organisations to seek its own tax advice.





## Future Energy Event

Event and site tour with year 10 students at Energex facilities



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## Mentoring and work experience

12-week mentoring and work experience program for 3 university students



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## STEAM Day

Event exploring autonomous vehicles with year 10-12 students at The University of Queensland



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 **DREAM BIG**

# Overview of Financial Position

In the 2019 financial year, Dream Big Australia delivered a broad range of services focused on our strategy of providing the best STEAM education. To preserve the ongoing financial strength of the organisation, expenditure on activities which didn't directly contribute to young people's engagement were prudently managed, resulting in a \$8,228.77 surplus for the 2019 financial year.

The company is financially strong with Investment Partner's funds increasing to \$11,000. Importantly, the group derived in-kind contributions from Collaborative Partners contributing to our increasing ability in event management capability, access to best-practice classrooms for events and advertising in a number of online platforms to enhance brand reputation of Dream Big Australia and our chosen partners.

It was particularly pleasing to see the formation of our Education Advisory Board and delivery of STEAM Day with The University of Queensland as our industry collaboration and community engagement is an important, core purpose of Dream Big Australia.

During the past financial year, Dream Big Australia has focused on improving its base systems, processes and STEAM activity content to deliver more agile, more efficient and more effective events and presence in the education market.

After our first year and two quarters of operation, we have sufficient funds available to support our continued outreach to Queensland. Our vision is to quickly move to a position where 70% of our partner investment contributes directly to our STEAM engagements with young people, particularly those in regional areas where students and schools have limited access to outreach programs. In this period of operation, we focussed on investing in our base systems, processes and STEAM activity content, with 19.3% of our total expenditure achieving

engagements with young people in Queensland. It is our objective to decrease expenditure not directly related to engagement as our company set-up costs decline.

Careful financial management of Dream Big Australia has allowed growth of the company's financial foundations. With strong liquidity, the company has the financial capability to navigate through future challenges that may arise. Significantly, Dream Big Australia has a financially robust base as it enters its second year of operation in Queensland and prepares to meet the organisation's objectives for the years ahead.

Refer to Table 1 and Table 2 for the Financial Year 2019 and 2020 H1 results.



## Financial Year 2019

Table 1

Revenue/Expense	Category	Description	Sum of Transaction Value
Revenue	Donations	Investment Partners	\$ 11,000.00
	<b>Total</b>		<b>\$ 11,000.00</b>
<b>Revenue Total</b>			<b>\$ 11,000.00</b>
Expense	Fees	ASIC Fees	-\$ 1,230.12
	Platforms	Website hosting and domains	-\$ 204.00
	Marketing	Event advertising	-\$ 1,012.61
	Accounting	Professional Fees	-\$ 324.50
	<b>Total</b>		<b>-\$ 2,771.23</b>
<b>Expense Total</b>			<b>-\$ 2,771.23</b>
<b>Remaining Funds</b>			<b>\$ 8,228.77</b>

## Financial Year 2020 Q1-2

Table 2

Revenue/Expense	Category	Description	Sum of Transaction Value
Revenue	Carry over funds	Investment Partners	\$ 8228.77
	<b>Total</b>		<b>\$ 8228.77</b>
<b>Revenue Total</b>			<b>\$ 8228.77</b>
Expense	Fees	ASIC Fees	-\$ 158.15
	Marketing	Work experience costs	-\$ 122.00
	Event(s)	Cost of services provided	-\$ 954.39
	Event(s)	Travel	-\$ 1,249.27
	Accounting	Professional Fees	-\$ 330.00
	<b>Total</b>		<b>-\$ 2,813.81</b>
<b>Expense Total</b>			<b>-\$ 2,813.81</b>
<b>Remaining Funds</b>			<b>-\$ 5414.96</b>

### Board Remuneration

The Board of Dream Big Australia consists of up to three directors. All positions are voluntary.



## Contact us

Dream Big Australia

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