

THE CDU SCIENCE EXPERIENCE

6, 7 & 8 June, 2023

Charles Darwin University, Casuarina Campus



You make CDU

Students from Good Shepherd Lutheran College, Haileybury Rendall College, Nhulunbuy High School, The Essington School of Darwin, St John's Catholic College, Mackillop Catholic College, Dripstone Middle School, Henbury School, O'Loughlin Catholic College, Palmerston Christian School, St Joseph's Catholic College (Katherine), Darwin Middle School, Palmerston College, Sattler Christian College, and Nightcliff Middle School.

THE CDU SCIENCE EXPERIENCE

Program Overview

Charles Darwin University (CDU) is one of 34 universities in Australia who host the annual Science Experience. The event program is open to any year 9 student who may be interested in learning more about science, engineering, and information technology, regardless of their academia. CDU is committed to supporting and encouraging participation from students of Indigenous or low socioeconomic status (SES) background, regardless of their current year level. Each year, we secure additional sponsorship to support the travel costs of transport, meals, and accommodation for remote students.

CDU acknowledges that our success relies on sponsorship from our national sponsor, the Science Schools Foundation, NT Government, local and intrastate business, and community organizations. This support ensures all NT students have the opportunity to participate in this event, not just those who have the financial means.

Program Objectives

The program aims to ensure students know what to expect as they enter their final years of schooling, and of the direct link between their education and future opportunities. We understand that this time in their life is vital, and a positive approach to education can make a meaningful difference. By providing a solid educational foundation, students are able to make informed decisions regarding subject selection for their stage 1 and 2 studies.

CDU's aim is to highlight the need for skilled workers in the NT and demonstrate the opportunities available to them locally. We do this by;

- Offering a broad range of both theoretical and practical learning experiences in both our Technical and Further Education (TAFE) and Degree Education sectors.
- Introducing the supportive network of local business' in the Territory, and the wide range of employment opportunities available.
- Providing an overview of the research programs and activities CDU are currently engaged in on a local and national level.
- Including career investigations, offering an insight into the options they will have in the next 3 years of secondary schooling, as well as highlighting the differences in obtaining a Northern Territory Certificate of Education and Training (NTCET) and NTCET with Australian Tertiary Admissions Rank (ATAR).

THE CDU SCIENCE EXPERIENCE



Event Information

To maintain a high standard throughout the event, a maximum of 100 students are accepted into the program. This number does not include school support staff. All attendants receive meals and refreshments, with students also receiving a CDU Science Experience uniform shirt and bag.

All students and teachers also receive a certificate of participation. Students are encouraged to write a brief thank you letter to their sponsor, as well as an event evaluation form to ensure that we keep offering an enjoyable experience for students.

In 2023, 15 schools participated in the program, including Nhulunbuy High School and St Joseph's Catholic College, Katherine. Unfortunately, due to staffing issues, Xavier Catholic College, Wurrumiyanga were unable to join us.

Student Evaluation – Summary

In total, we received 90 student surveys. 100% of students who attended confirmed having a better understanding of the courses available to them at CDU. 98% of students stated that the activities included within the event were both informative and fun, with Paramedicine and the HIVE tied as two of their favourite activities. This was followed closely by the NT Medical Program, Exercise and Sport Science and the session on Study and Careers.

63% of students have requested further information be sent to them, with 98% of students saying that they would now consider studying a Vocation Education and Training (VET) or Higher Education qualification.

Student career/study requests

Science	Health Science	Engineering	Psychology
Paramedicine	Architecture	Business	Aquaculture
Nursing	Design	Agriculture	Humanitarian Aid
Midwifery	Environmental Science	Conservation	Exercise and Sport Science
Medicine	Nutrition	Hospitality	Forensic Science
Mechanic	Electrical	Computer Science	Information Technology
Education	Metal Work	Biology	Law

THE CDU SCIENCE EXPERIENCE

Our Invaluable Student Sponsors



Rotary Club of Litchfield/Palmerston



Rotary Club of Darwin Sunrise



Science Schools Foundation



Dept. of Environment, Parks and Water Security



Office of the Chief Minister



Casuarina Lions Club

THE CDU SCIENCE EXPERIENCE



Inpex Australia

The Experience!

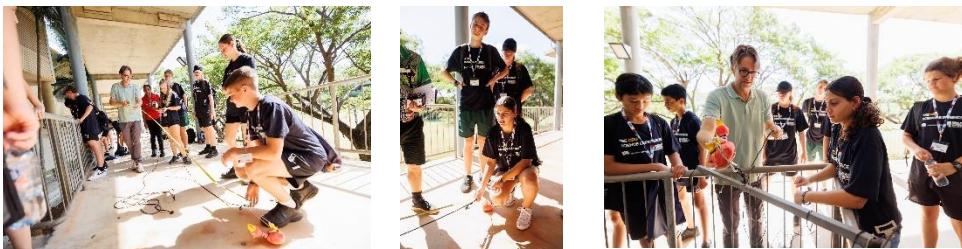
NT Medical Program



The NT Medical Program gives students an opportunity to study medicine locally, preparing them for a rewarding career. In affiliation with Flinders University, students complete both the Bachelor of Clinical Sciences and the Doctor of Medicine. Students had an opportunity to view the anatomage table, practice their CPR skills and test their knowledge of human anatomy and rebuild a skeleton.

www.cdu.edu.au/study/course/bachelor-clinical-sciences

Engineering – Bungee chicken



Students are provided with a mathematical equation – where the correct answer provides the right amount of bungee cord to drop from the third floor of Purple 14, without hitting its head on the ground below!

<https://www.cdu.edu.au/engineering-it-environment>

THE CDU SCIENCE EXPERIENCE



Exercise and Sport Science



Exercise and Sport Scientists are experts in understanding how human bodies respond to exercise, and how to make a difference to the quality of life for all people. Exercise and Sport Scientists use exercise as an intervention to improve health and fitness, enhance physical performance and prevent and rehabilitate injury in both healthy and physically challenged populations. Students tested their concentration and teamwork with individual and group activities.

<https://www.cdu.edu.au/health-human-sciences>

Health Immersive Virtual Education (HIVE)



The Health Immersive Virtual Education (HIVE) uses virtual and augmented reality to allow students to explore complex subjects in a virtual environment, engaging all their senses. Students were able to virtually explore the heart and lungs, observing the differences in healthy and sick organs.

<https://www.cdu.edu.au/health-human-sciences>

Paramedicine



Students were introduced to life as a Paramedic in the vast NT. Experiencing the resources available in the fully kitted out CDU Ambulance, as well as the tools and techniques used to move injured patients. Students got to put their skills to the test on one another and learned some life saving techniques to inspire them in the coming years.

<https://www.cdu.edu.au/health-human-sciences>

THE CDU SCIENCE EXPERIENCE

Environmental Science



This activity looks at biodiversity and the amazing variety of small creatures living in simple, everyday environments. Students will collect samples from simple environments (such as pond water and decomposing flora waste) and examine under microscopes the different forms of life present. Students were encouraged to use the resources provided to identify the life forms discovered, ask questions and then participate in discussion.

<https://www.cdu.edu.au/engineering-it-environment>

Study Pathways for the job you want



What do you need to do now, at school, to prepare for your dream career?

We explain the differences between Vocational Education and Training (VET) and Higher Education, define what an ATAR is and prepare students for their senior years of high school. Students were provided with a bit of an insight into the different job and career opportunities available to them, with information around the different levels of qualifications.

<https://www.cdu.edu.au/schools-engagement>

THE CDU SCIENCE EXPERIENCE

Trades Tour



Students were taken on a tour of our TAFE precinct, highlighting the numerous trade options available at CDU. VET for Secondary Schools opens to students in year 9, so it provides an opportunity for students to see the facilities and register their interest in enrolling into a program.

Students were shown through the engineering, plumbing and electrical workshops, and had a chance to see some first year apprentices.

<https://www.cdu.edu.au/study/vocational-education-training>

Museum and Art Gallery of the NT (MAGNT) Activity



Students were taken by bus out to East Point Reserve, where they met with staff from MAGNT to run two interactive sessions. Splitting into two groups, students were able to investigate ant patterns and feeding habits, and experience the mangrove walk while looking for different amphibious species.

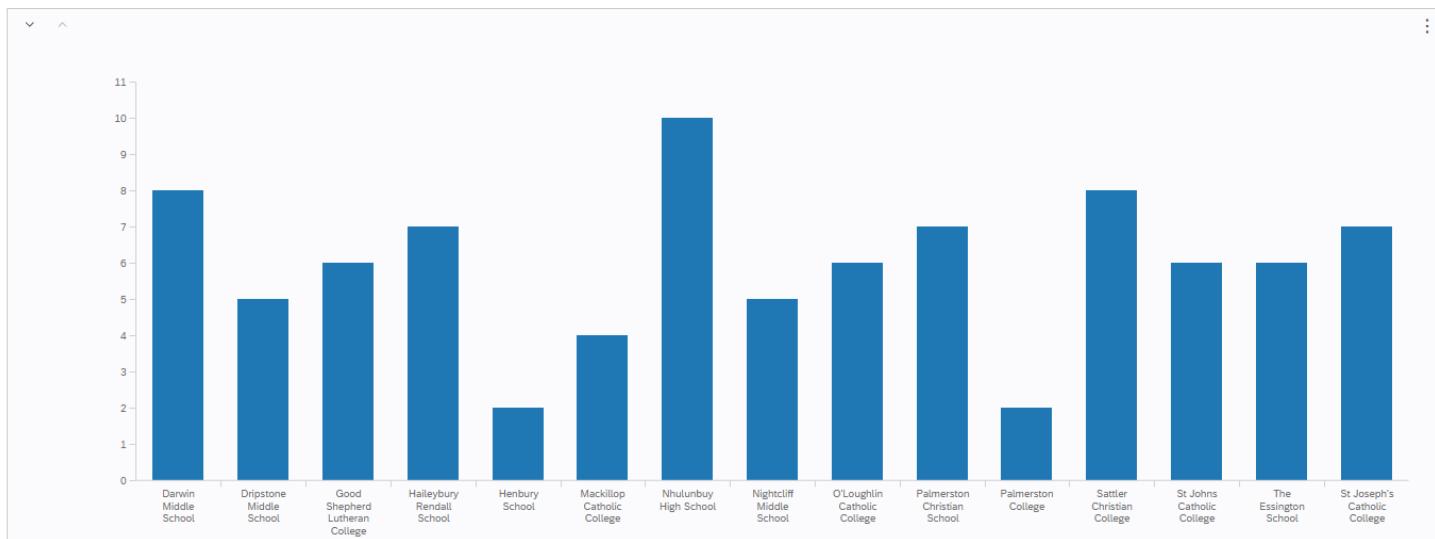
THE CDU SCIENCE EXPERIENCE



Student Statistics

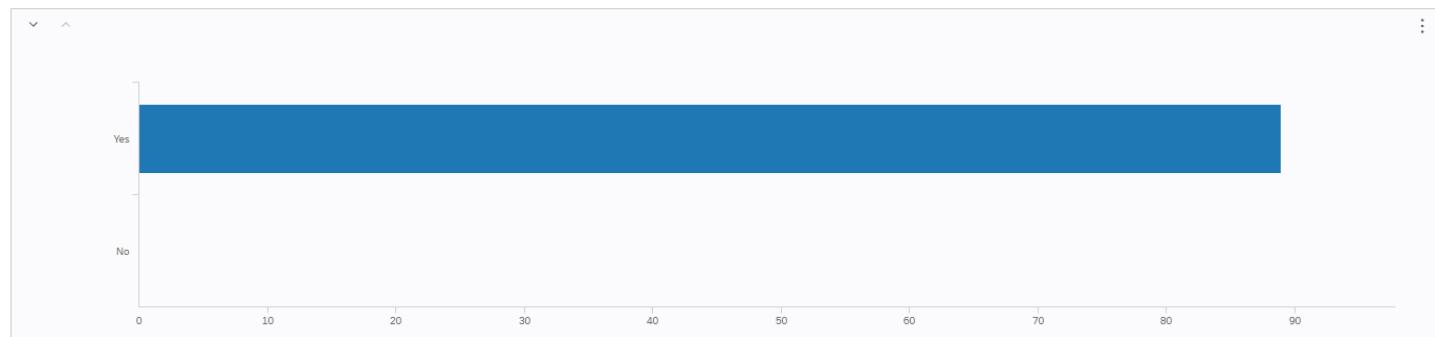
Q2 - What school are you from?

Page Options ▾



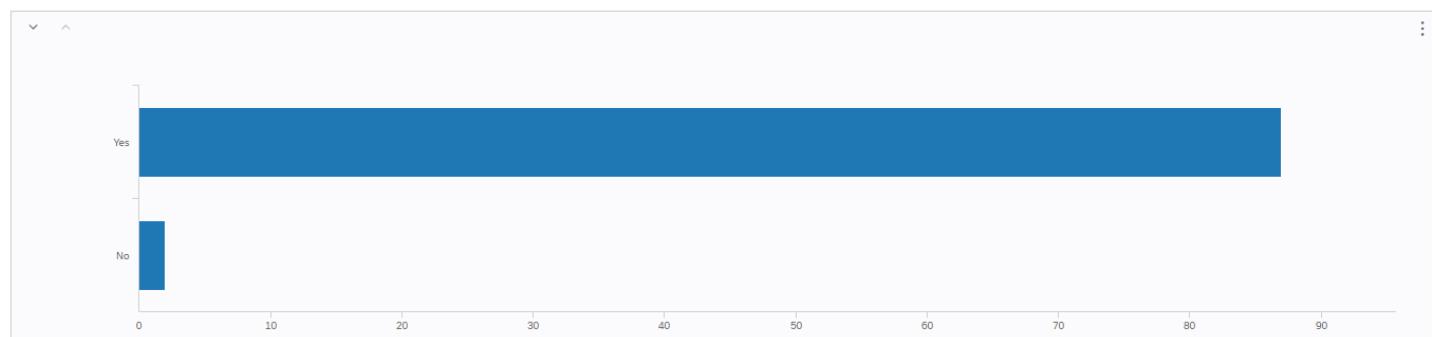
Q3 - Did this week give you a better understanding of the courses available at CDU?

Page Options ▾



Q4 - Were the activities involved in this week interesting and fun?

Page Options ▾

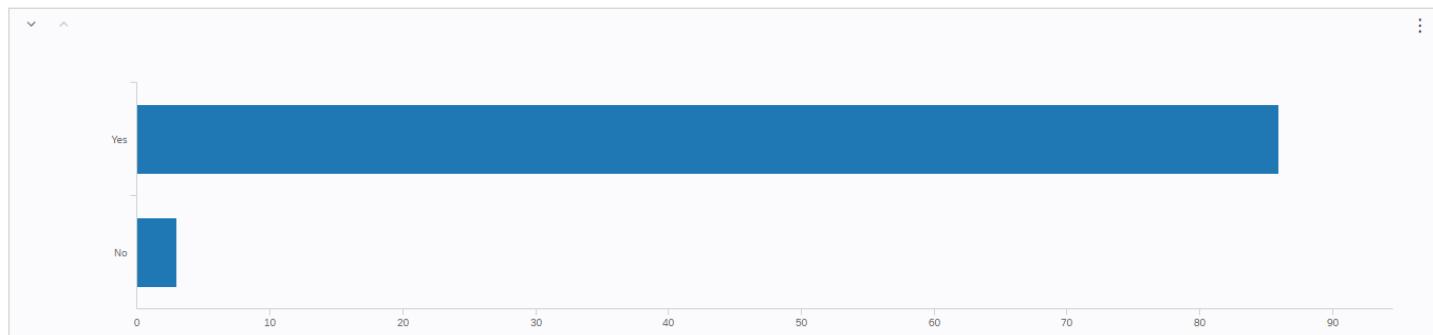


THE CDU SCIENCE EXPERIENCE



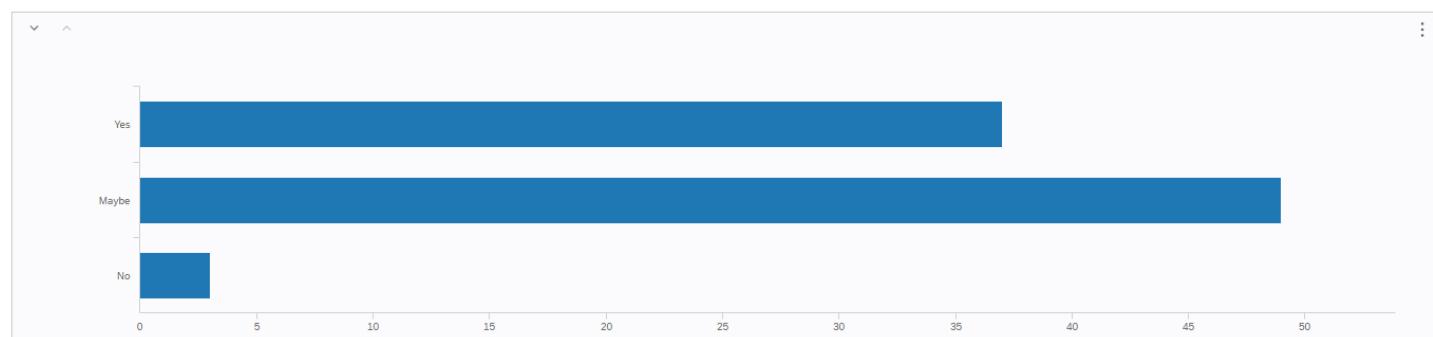
Q5 - Did you find the sessions informative? Did you learn something new?

Page Options ▾



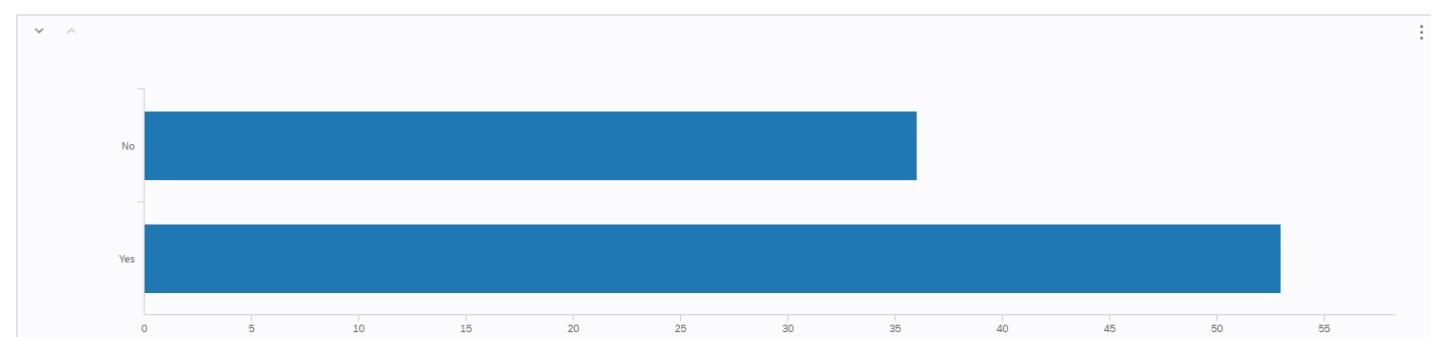
Q6 - After school, would you be interested in studying a TAFE course or Degree Education degree?

Page Options ▾



Q7 - Would you like more course information sent to you? If yes, please tell us what study areas below and we will send it to your school

Page Options ▾



THE CDU SCIENCE EXPERIENCE

Q8 - What is your favourite memory of the week?



going on the mangrove walk, meeting new people and being able to experience something new.

exploring and being in the NT medical program. Paramedicine and the engineering (bungee chicken) activity.

Looking at creatures under the microscope in biology

I loved medicine, paramedicine and biology. It was so interesting to learn different functions of the body.

Rubber chicken bungee drop

everything

I love the boardwalk in the mangroves. It was nice and fun walk in the nature. I love seeing Munha rays and the shovel-nosed shark. I love camping and nature so this was the best.

Learning about the mangroves at East Point and seeing the crabs after the group kept walking. I enjoyed meeting new people and hanging out with friends.

seeing paramedicine people

My favourite memory was mainly from the environmental science which we found bugs in the soil and microscopic organisms in the pond water.

Learning about Environment. Meeting new friends

I loved being able to see all different kinds of career ideas that might spark a possible interest. Being at CDU gave me a better understanding of all the different jobs out there.

when we went to see everything.

the bungee chicken was a fun experience. so was the trade tour

the mangroves walk. It was so much information and very nice guide.

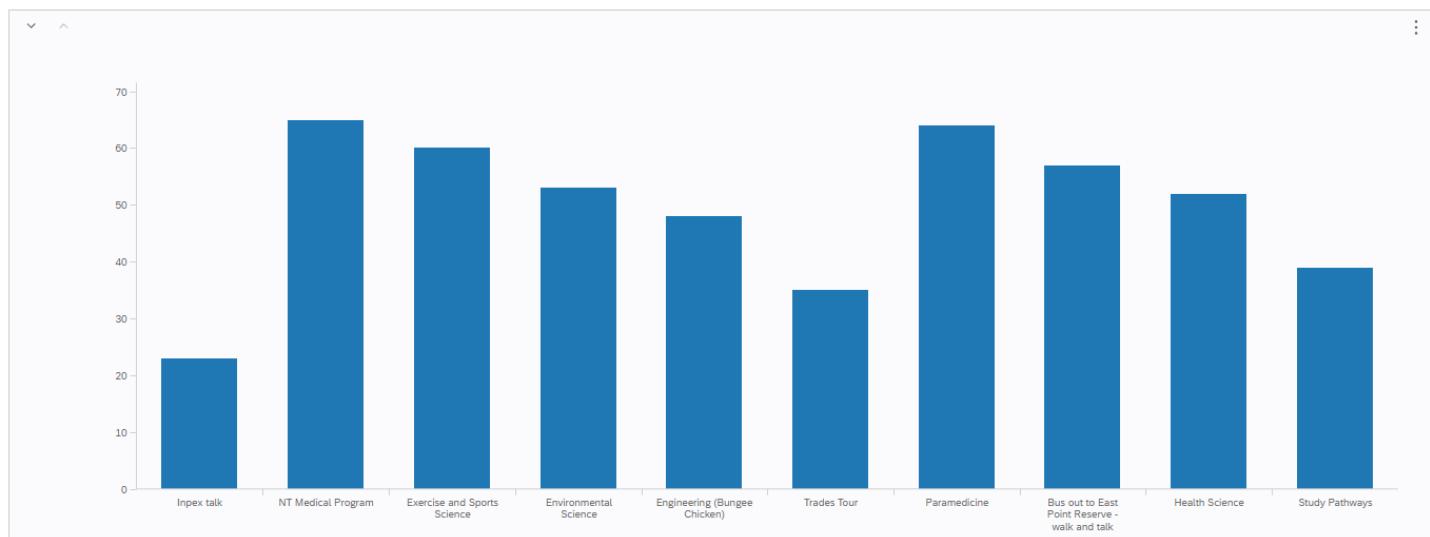
meeting new people

THE CDU SCIENCE EXPERIENCE



Q9 - Please tick the activities that you LOVED

Page Options ▾



Sponsor 'Thank You' Letters

Dear Department of Environment, Parks and Water Security. I would like to personally thank you for supporting me so I could attend the CDU science experience. My name is Cassidy Boja and I am one of the Nhulunbuy High School students that you sponsored. Being from a small town, I had never thought an opportunity like this would not only be available for me, but also handed to me. I am so incredibly grateful as this extraordinary experience has opened my eyes to a world I have never been exposed to before. I think it's important for students to attend events such as this one as it gives a unique and unforgettable feel to learning. After this experience, I think I know where I want to ~~go~~ go in life, and for that I am so thankful.

THE CDU SCIENCE EXPERIENCE

Dear Inpex Darwin,

My name is Matthew Walmsley and I'm from O'Loughlin Catholic College. I'm really grateful that you've allowed me to come and attend this amazing opportunity. I've learnt a lot at this experience and I've been able to try activities I can't do elsewhere. I've participated in environmental sciences, robotics, maths and sports sciences. Although I'm still unsure of what I want to be, those days have narrowed down my choices. Thank you so much for giving me this chance to extend my knowledge, I'm really grateful. Once again,

THANK YOU!

And I hope you'll give others this opportunity too.

From,

Matthew Walmsley

THE CDU

SCIENCE EXPERIENCE

Dear Science Schools Foundation,

I am very thankful for this tremendous opportunity you have provided me with. If it weren't for you I wouldn't have been able to participate in all these amazing experiences. It means a great deal that a stranger would pay for this who doesn't even know me. So, I would like to share what your contribution has done for me. I have learnt various career paths in science that have expanded my knowledge of things that I am interested in. My favourite activity so far has been in the environmental science department. We looked through microscopes at pond water organisms in the environment and diverse organisms present in leaf matter. These events are very important for students like myself to provide opportunities that positively influence our future. So for that I am very grateful for your contribution and hope you continue to sponsor young curious students like myself.

Thankyou! Kind Regards Elena Lewis

Dear ~~the~~ darwin

thank you for letting us have an amazing time by providing ~~the~~ the money for us to be here. I am very grateful that you gave us this opportunity by paying thank you

xoxo - kirsten

THE CDU

DEPARTMENT OF ENVIRONMENT

Dear Office of chief minister,

Myself Devaganga Senthosh from Essington, thank you so much for sponsoring this event. I do not know if a simple thank you will be enough to tell you how very thankful I am to be able to attend this event. It is truly amazing of you to sponsor such event for the students. We were provided with lots of informations that will help us achieve our dreams. This event has helped me understand career path ways and narrow down on to help me determine my career choices. This has really helped me discover many different career pathway for my future. Once again, I thank you for sponsoring such a wonderful event for us students.

thank you once again,

Sincerely,

Devaganga Senthosh

Dear Department of Environment, Parks and

water security. Thank you for your support and kindness you've shown us by providing us money to be able to have the opportunity to attend the CDU science experience. I myself is thankful to have the support of Education. It was an opening experience that has interest me into Sports science/health science. And really helped me look for careers to really enjoy. It makes me really excited to start university already.

THE CDU

Dear Rotary club of Litchfield / Palmerston,

Thank you from the bottom of my heart for sponsoring me and many others for today's event. I am so grateful for this opportunity in science and life in university. I have learnt so much from this experience and you are the ones that made it happen. I now know how to locate each bone in the body and successfully provide CPR. This event has made me realised that I want to work in the medical field. Thank you again for this.

From Moya (I'm from goodshepherd)

♡ ♡ ♡

THANK YOU

Dear Inpex

My name is Keerthana, and I am so grateful that you paid \$190 for me to go to this event. I think this is a very good opportunity for students like me to understand what to be in the future. Because of you guys I have found that I want to be an orthopedic surgeon. Thank you for doing this and hope you continue it for the other students to come.

THE CDU SCIENCE EXPERIENCE

A HUGE thank you to all who made this event
possible!

Sponsors

Science Schools Foundation	Dept. of Environment, Parks and Water Security
Rotary Club of Litchfield/Palmerston	Dept. of Education
Rotary Club of Darwin Sunrise	Dept. of the Chief Minister
Darwin Casuarina Lions Club	

Opening Ceremony

Kieran Marchant – Inpex Australia Engineer and CDU Alumni

Alwin Lal – Inpex Australia Graduate Engineer and CDU Alumni

Lecturers and Industry Professionals – session leads

Buddhika Weerasundera David Newman	NT Medical Program
Francois Botha	Engineering
Sam Willis Christine Rioux	Paramedicine
Liz Grylls	Exercise and Sport Science
Jaime McCartney	Trades Tour
Irla Oakley	Study Pathways for the job you want
Paul Irving Sufyan Akram	Health Immersive Virtual Education (The HIVE)
Quan Tien Sean Bellairs	Environmental Science
Kirsti Abbott Jude Dawson Richard Willan	MAGNT Activity

Group Leaders, Student Ambassadors and CDU Events Team

Natalie Hodge – Green Group Leader	John Suelila – Yellow Group Leader
Kayla Hall – Pink Group Leader	Eileen Ah-Wong – Orange Group Leader
Jaime McCartney – Event Coordinator	Tia Milohis – Official Welcome
Irla Oakley – Master of Ceremonies	