2019 International Day of the Tropics Sprinting the Tropics 28 June 2019 James Cook University

(Global Tropics Future Project, Thuringowa State High School)











INTERNATIONAL DAY OF THE TROPICS

The International Day of the Tropics was endorsed by the United Nations in 2016 and is celebrated annually on 29 June. It commemorates the date when in 2014, the inaugural State of the Tropics report (an initiative led by James Cook University in collaboration with eleven institutions) was launched.

SPRINTING THE TROPICS

The 2019 International Day of the Tropics was celebrated with 106 Global Tropics Future Young Scholars from 22 North Queensland schools competing in a design sprint challenge. *Sprinting the Tropics* was held at James Cook University and students collaborated in mixed school groups and ages to innovate solutions to reduce the prevalence of the highly contagious and deadly diseases that exist in the tropical regions of the world.

Keynote speakers shared their expertise on tropical infectious diseases which enabled students to understand the problem and its consequences on our tropical neighbouring communities. Students then used the design



thinking process to define the problem, ideate a solution, create a prototype and present their solution.

Speakers were:

- Professor Maxine Whittaker (Dean of College of Public Health, Medical and Veterinary Sciences, James Cook University and Co-Director WHO Collaborating Centre for Vector Borne and Neglected Tropical Diseases)
- Associate Professor Catherine Rush (Immunology, James Cook University and member of the Australian Institute of Tropical Health and Medicine)
- Gloria Pundari (Regis, Kirwan, Final year Masters of Public Health, tropical medicine and Masters of Business Administration).
- Grant Dale (Principal of Thuringowa State High School)





The students' solutions were judged according to technical innovation, creativity, design, usefulness and presentation.

Innovations included:

- Humidifier: spreads a gas to kill bacteria in the air
- Drinkable vaccine
- TB Puffer: patient inhales gas to kill most of the bacteria
- Phone app: translates TB information into 851 languages. It also gives medication reminders, symptoms and contact information.
- Locals helping locals: train locals to become knowledgeable and be able to treat, diagnose and immunise locals.
- Putting minerals in rain water tanks so people drink it every day.
- Dance: Increase awareness of TB through the universal language of dance to explain what it is, symptoms and treatment.
- More convenient medication: take one gummy tablet per day instead of 4 antibiotic tablets

SCHOOLS REPRESENTED

Aitkenvale State School Kelso State School

Cameron Downs State School Mundingburra State School

Charters Towers School of Distance Education North Shore State School

Clare State School Osborne State School

Cranbrook State School Rasmussen State School

Currajong State School Richmond Hill State School

East Ayr State School The Willows State School

Gumlu State School Thuringowa State High School

Heatley State School Townsville Central State School

Ingham State School Weir State School

Ingham State High School Wulguru State School

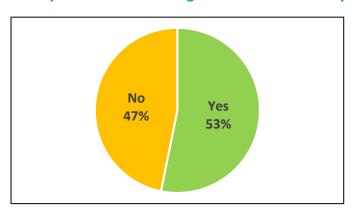
(106 students, approx. 40 teachers and parents)



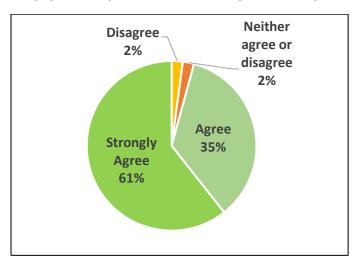


FEEDBACK

Is this your first time visiting James Cook University?



I enjoyed today's International Day of the Tropics Design Sprint.



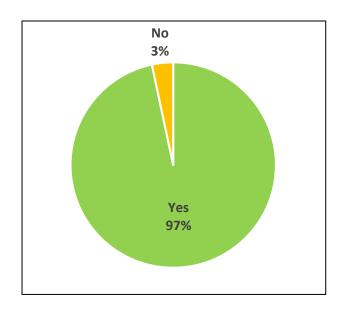
Why?

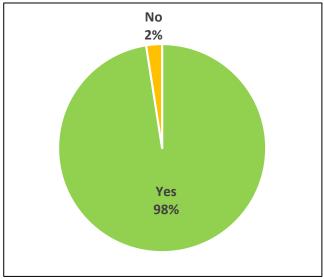
- This day was an extraordinary and rare experience.
- Because I love innovating and meeting new people.
- Because it gives you a chance to make things better.
- Because I was able to meet new people and use my mind to come up with something new.
- Because we got to let our creative mind flow.
- It was challenging but also very exciting and enjoyable.
- I think looking back from not knowing what TB was to making something to solve it in 4 hrs.
- Coming to JCU



Has this event increased your interest in studying STEM courses at school?

Has this event increased your interest in studying STEM courses at university?





Teacher and parent comments:

- Amazing effort and organisation from all staff. Very impressed with the program and how amazing kids are.
- Seeing the kids critically thinking and using each other's ideas to come up with a solution.
- A pleasure to see students collaborating using creative and critical thinking.
- Seeing the kids learning a new topic and finding a solution in a limited time with strangers goodbye comfort zone!





For more information on the Global Tropics Future Project, contact:

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Facebook: Global Tropics Future Young Scholars Project