



Thuringowa State High School
James Cook University
Global Tropics Future Project



February, 2021

WELCOME

This year, the Global Tropics Future Project and Qld Virtual STEM Academy at Thuringowa State High School, celebrates 5 years of delivering STEM enrichment programs to students across Queensland. Despite the difficulties of 2020, the Qld Virtual STEM Academy (NQ) delivered 33 programs to over 440 students from 42 schools.

A highlight of 2020, was the formation of ANZSEA (Australia New Zealand STEM Education Alliance). This program enabled students from Queensland, New South Wales, Northern Territory and New Zealand to collaborate in a virtual course together.

Another highlight of 2020, was Thuringowa State High School being recognised with two National awards:

- CSIRO Indigenous STEM School Award
- Resilient Australia School Award

We look forward to another adventurous year as we innovate new experiences and challenges for our students.

INTRODUCING THE GLOBAL TROPICS FUTURE TEAM

Wendy Bode - Deputy Principal, Global Tropics Future Project, Thuringowa State High School.

With over 20 years experience as a Science teacher and Head of Department, Wendy has been leading the Global Tropics Future Project since 2017. She is shaping the future of STEM education in North Queensland to ensure students are prepared to meet the increasing demands of STEM graduates in the workforce.

In collaboration with James Cook University, the Global Tropics Future Project has progressed and evolved to engage and inspire more than 440 Young Scholars from 42 Queensland schools. STEM enrichment experiences include collaboration with STEM professionals from a wide-range of careers and future STEM pathways.



The Global Tropics Future Project's innovative approach to STEM engagement and learning, has been recognised regionally and nationally as the 2018 State Winner for the Department of Education's *Showcase Award for Excellence in Industry Partnerships*. In 2019, the project was a finalist for *Best STEM Project* at the Australian Education Awards, selected by The Educator Magazine in *The top 40 Innovative Schools* nationally and winner of the *2019 Indigenous STEM School Award*.

Sam Askin - Global Tropics Future teacher, Thuringowa State High School

Prior to commencing his teaching career at Thuringowa State High School in 2015, Sam completed a Bachelor of Science (Biochemistry Honours) at James Cook University and also worked both as a biochemist and in teaching program development at JCU. Sam now teaches Thuringowa State High School's signature iSTEM program, senior chemistry and STEM, junior science, and programs in the Queensland Virtual STEM Academy.

Sam has a strong passion for connecting students with the ways that science and STEM are relevant in their real-life contexts after school, in research institutions such as James Cook University, as well as in industry. He is enthusiastic about driving new innovations for and with the students. He has introduced a virtual reality program to the school, has developed the Senior STEM and Data Science subject to open further opportunities beyond the school STEM curriculum, and is leading a project on building students' 21st Century skills.



Kaitlyn Hotz - Global Tropics Future teacher, Thuringowa State High School

Before commencing her teaching career, Kaitlyn studied a Bachelor of Clinical Exercise Physiology at Queensland University of Technology. She then undertook a Graduate Diploma of Education (Secondary) at James Cook University. Kaitlyn is in her fourth year of teaching at Thuringowa State High School and her third year in the Global Tropics Future team.

Kaitlyn's enthusiasm for inspiring students into STEM career pathways leads her to providing extra-curricular STEM opportunities as well as delivering STEM to students across Queensland in her role as Queensland Virtual STEM Academy and iSTEM teacher. This year, Kaitlyn will be focussing on developing and measuring the 21st century skills of our learners, including collaboration and critical thinking.



Grace Laundon - Global Tropics Future teacher, Thuringowa State High School

After completing her Bachelor of Education (Secondary) at the University of Southern Queensland in Toowoomba, Grace spent the next four years teaching at Miles State High School. Whilst there, Grace taught a wide range of subjects including Senior Biology and Junior Science, English, Geography and History. Grace also took on roles such as Year Coordinator and STEM Coordinator.

Grace has been a member of our team since 2019 and has thoroughly enjoyed delivering hands on approach to prepare students to become 21st century citizens with the skills and capabilities needed to allow them to work effectively in an ever-changing world. As a continuing iSTEM, Queensland Virtual STEM Academy and junior science teacher, Grace is keen to continue to engage students in STEM pathways, both in the targeted courses, as well as through cross-curricular opportunities in the classroom. Grace strongly believes in giving students opportunities to understand the importance of STEM in their everyday learning and gain real-world experience.



Renée Louwen-Skovdam - Global Tropics Future teacher, Thuringowa State High School

Renée completed a Bachelor of Applied Science in Launceston at the University of Tasmania. Following which she completed her honours degree concentrating her research on seahorses and her PhD in aquatic animal health. As a result Renée was awarded Young Tasmanian Scientist of the Year and developed a passion for scientific communication and education. After completing a Masters of Teaching (Secondary) through Federation Universities Australia, Renée joined us at Thuringowa State High School, where she teaches science, mathematics, aquatic practices and textiles and food studies.



Renée is incredibly excited to become a member of our team and assist students to develop their critical and creative thinking skills and prepare them for the challenges of an ever-changing world. As a new iSTEM and Queensland Virtual STEM Academy teacher, Renée is keen to give students opportunities to become independent learners, gain real-world experiences and prepare them for their future.

Jennie Nash – Global Tropics Future teacher, Ingham State High School

Jennie completed a Bachelor of Science at James Cook University majoring in Biochemistry and Aquaculture. Following completion of this degree she worked as a research scientist for Department of Primary Industries before completing a Graduate Diploma in Secondary Education at the University of Queensland. Jennie is an experienced Chemistry and Biology teacher working in Brisbane and North Queensland in the past 24 years.



Jennie has a passion for all things STEAM (Science, Technology, Engineering, Arts and Mathematics). As a STEAM educator she is the leader of the Ingham State High School STEAM team which has been working hard on preparing for their inaugural Drone Racing competition later this year. She has overseen the Global Tropics Future participation at Ingham State High School for the last 3 years and joins the Global Tropics Futures team this year as an iSTEM facilitator. Jennie is very much looking forward to furthering her involvement with the Global Tropics Futures Team and is excited to be involved at another level.

Luke Johnstone - Global Tropics Future teacher, Thuringowa State High School

Before becoming a teacher, Luke received a Bachelor of Planning from James Cook University and worked as a Senior Town Planner for private industry and the Department of Infrastructure Local Government and Planning. He then completed a Graduate Diploma of Education (Secondary) at James Cook University. Since 2018, Luke has been a teacher at Thuringowa State High School teaching a wide variety of subjects in the fields of Digital Technology, Humanities and Science.



Luke joined the team in 2020 and has enjoyed exploring the opportunities teaching in the virtual STEM environment has provided. Luke has a passion for inspiring students to connect their learning to real life contexts, highlighting new career pathways and avenues of inquiry. This year, Luke is working to develop Thuringowa State High School's Digital Technology program.

For all information and news about the Global Tropics Future Project:

Website: <https://globaltropicsfuture.eq.edu.au/Pages/default.aspx>

Facebook: Global Tropics Future Young Scholars Project