

NEWS

September 2023





'Growing curious, innovative minds.'

STEAM-ED Charitable Trust is proud to be engaging youngsters in Science, Technology, Engineering, Art and Maths.

STEAM-ED's mission is to provide open, equitable, high quality and affordable education services that allow students to explore and question, using STEAM related fields as a catalyst to inspire them in both the present and the future.

STEAM-ED works hand in hand with the community to deliver education services to all walks of life to allow a STEAM focused future for everyone.

Our Programmes:

- 1. Homeschool Classes
- 2. Afterschool Classes
- 3. In-school Classes
- 4. Holiday Programmes
- 5. Competitive Robotics Club

We have had an awesomely busy time at STEAM-ED since the last newsletter in June! The July school holiday programme was totally booked out with a waiting list on some days. Topics covered ranged from Flight to Polymer Clay art to Movie making, and of course robotics including combat. With an average of 29 children per day during robotics week and 31 children per day during STEAM week (most days were limited to 30 due to space) it is great that kids are wanting to experience all things STEAM.

During Term 3 we were invited to collaborate with STEM Wana Trust to deliver their STEM in the Community initiative out at Omokoroa No.1 School, Waihi Beach School and Oropi School. These were all two days of Space related activities which the students were very eager to share with their parents at the end of each day. The teachers were also very positive so we hope we will be able to work with these schools (and others they talk to) again in the future.

We were delighted to have Tahatai Coast School bring 140 of their Year 5/6 students to our venue on the 24th & 25th August. They asked us to come up with a 90minute workshop for 5 classes with the theme "Whiz, Pop, Bang!" This was the first time we had put together something like this for so many children over a short period but it went really well, so we are hoping to promote this type of workshop to other schools in the future - however we will need to find more team members if it is to become a regular occurrence as it was on top of our usual weekly timetable!













STEAM Education Summit

STEAM-ED was invited to present at the STEAM Education Summit held in Auckland on 28th & 29th August. Due to Kimberlie Cording's comprehensive and international teaching experience, she was deemed to be the best qualified to talk to the topic we were allocated, which was "Investing in school infrastructure to enable the effective and equitable delivery of STEAM education". With Toni's support, Kimberlie represented us well. It was inspirational to be amongst approx. 120 other educators who were focussed on delivering STEAM to their students. It is easier to do at high school level with specific subject teachers, however primary schools find it much more difficult as teachers often don't have the time, interest or resources. where providers such as STEAM-ED can be utilised. Funding for these additional sessions is the only issue with no MOE support currently available to us.



TERM 4 TopicSTEAM of the Brain, Memory & Emotions

In term 4 we will explore the human mind, memory and emotions by doing a science-based study of the movie 'Inside Out'. This relatable and engaging movie will give us a child-friendly way to explore neuro-science and the world of emotions & memory. Students will then learn how to use digital movie editing software to craft their own stories, creatively expressing their new insights into the workings of the mind.

We have chosen this topic in response to the growing number of children we have attending who have anxiety.



During Term 3 we have worked with five schools in the Western Bay of Plenty delivering our In-School Robotics programme - Te Kura o Matapihi, Te Puke Primary, Greerton Village School, Merivale School and Gate Pa School. Thanks to the support from Bay Trust, Community Matters, Tauranga City Council and Robotics Plus, we now have enough equipment to be able to work with up to 30 children at a time which is usually a full class, rather than schools having the hassle of needing to separate a smaller group of children out for us. This means we have engaged with 120 children this term (approx. 400 over the past 12 months), each receiving 8 weeks of lessons taking them from building a tower with 'something moving', through to building, driving and programming a robot complete with colour sensors, electromagnets, and LED bumper switches. All of these schools have asked us to come back and work with a different group of children in Term 4 which reinforces our confidence that the programme we are delivering is of value.

We are thrilled to be inviting representatives of each school to our very first **STEAM-ED Interschool VEX Go Competition** on 16th November at STEAM-ED. With the support of the SPARK Foundation for this competition, we want to extend the most enthusiastic of these students even more by giving them driving and programming challenges to complete whilst under time pressures. The focus will be on making sure they all go away feeling awesome about what they have achieved, encouraging them to continue their journey towards Technology or engineering careers. We hope some of our funders, the media and the children's families will be able to find some time to come and watch this event. One of the teachers we work with remarked that attendance is always the highest on the day we go to his class for robotics!

Thank you for your support as we inspire youngsters to think beyond!



September/October Holidays

Two weeks out from the holidays, spaces are filling fast and we already have two days fully booked. Week one will be robotics and electronics featuring our 'Girls Rock at Robotics Day'. This time we have Renee Young, a woman engineer from BECA coming to spend time with us.

Week two's activities include a Medieval Day, Spectacular Space, Sound and Music fun, and back by popular demand a 'Mindcraft' Day using our educational accounts.



Tauranga Careers Expo and VEX IQ Robotics Scrimmage

Once again we had a stall at the Careers Expo and then on day two moved upstairs to run a VEX IQ robotics competition for children aged 8-14 years. One team travelled all the way from Hicks Bay to take part! The networking with schools, local industry and other STEAM providers is always beneficial and we thank Tauranga Rotary for inviting us to participate and providing the upstairs space for the scrimmage.

Our competitive robotics teams continue to develop their robots as they build up to the National Championships which are on 9/10 December for our Juniors in Palmerston North, and mid-February for our seniors up in Auckland. The senior team is again aiming at doing well at Nationals and being chosen to represent NZ at the VEX Robotics World Championships in Dallas, Texas in May 2024. We have a number of juniors who will be stepping up to seniors in 2024. Thanks to their mentor, Paul de Rijk, for volunteering his time each week to work with these students.



Our Term 3 Topic **STEAM in the Kitchen** was well received by parents and children with 3 of the 4 sessions being 90% full, including a waiting list on the junior afterschool class.

Under Barbara Cook's careful tuition, they made soaps, salves, bath bombs, breads, butter and most of all, a wonderful mess that parents would probably not have appreciated at home!

Other Highlights in Term 3:

- Over all of our programmes we delivered 1250 student lessons during August. Considering we are a small team of four permanent part-timers and a couple of casuals this has been an amazing effort which we are extremely proud of!
- It is very pleasing to be increasingly recognised as a quality provider of STEAM education with schools approaching us to provide lessons and workshops for their students, and invitations to speak at or participate in 3 STEM/STEAM conferences/workshops over the last couple of months, including the House of Science one here in Tauranga.
- The installation of our new air conditioning has transformed our venue into an even more welcoming hub of learning! Frozen feet and purple lips that match our uniforms are thankfully just a distant memory...

What's next for 2023/24?

- On 19th September we will take part in Toi Kai Rawa's Hihoko/STEAM Innovation Day in Whakatane for schools and teachers to see what is available.
- We are eagerly awaiting the outcome of several funding applications which will determine the future of our In-School robotics programme and sincerely hope this will continue into 2024 given the positive outcomes for students.
- Continue to consolidate our core programmes whilst carefully taking advantage of new opportunities that arise. STEAM-ED has grown a lot over the past 6 months through being adaptable to opportunities that become available.















