



Tōnui Collab Job Description - STEM Navigator February 2023

Are you passionate about creating new and diverse STEM learning opportunities for tamariki and rangatahi? Would you like to contribute to the creation of meaningful workshops and wānanga that celebrate the diversity of STEM - science, technology, engineering, maths and mātauranga Māori? Join our team!

We are looking for a STEM Navigator to join our team and contribute to the growth of STEM learning opportunities for our tamariki and rangatahi.

Tōnui Collab is a charitable trust with a mission to empower young people to experiment and explore the diversity of STEM so that they might thrive. Tōnui Collab creates innovative STEM learning experiences for young people through school-based wānanga, marae-based wānanga, after school workshops and school holiday workshops.

We're looking for an enthusiastic kaihautū who is positive, welcoming, approachable, encouraging, with a growth mindset who can facilitate workshops and wānanga.

You will design and develop STEM related workshops and wānanga that inspire and engage primary, intermediate, and secondary aged students. Teaching plans will link to the key education objectives of Tōnui Collab, make connections to the NZ Curriculum, and celebrate localised curricula opportunities, celebrating Te Ao Māori through the integration of pūrākau Māori.

You'll also help coordinate our workshop schedules and keep our learning environments organised with your multitasking skills and confident attitude towards technology.

You will contribute to the celebration of STEM learning through digital storytelling via our social media and email campaigns.

This is a busy role with lots of variety. You'll help our students, teachers and parents, and make a real difference every day.

A clear police check is a requirement of working with children and a current Zealand driver's licence is essential for this role.

* We will consider both part time and full time applications.

* Due to our funding model, this role will be a fixed term contract till Dec 2023. Confirmation of future funding may provide an opportunity to extend the term of this role.

Sound like you?

Please send your CV with a covering letter to shanon@tonuicollab.com by 31 March 2023. Shortlisting and Interviews may take place before closing date.

For further information on this role please contact Shanon O'Connor at shanon@tonuicollab.com

JOB DESCRIPTION

JOB TITLE: STEMM Navigator

LOCATION: Te Tairāwhiti

RESPONSIBLE TO: Director

DATE: February 2023

KAUPAPA: Tōnui Collab is a charitable trust with a mission to empower young people to experiment and explore the diversity of STEMM* so that they might thrive. Tōnui Collab creates innovative STEMM* learning experiences for young people through school-based wānanga and marae-based wānanga, after school workshops and school holiday workshops. *STEMM - science, technology, engineering, maths and mātauranga Māori

JOB PURPOSE: The STEMM Navigator contributes to the creation of meaningful workshops and wānanga that celebrate the diversity of STEMM* for rangatahi in te Tairāwhiti.

KEY AREAS OF RESPONSIBILITY AND ACCOUNTABILITY

This is a dynamic and wide-ranging position, some of the key responsibilities include:

- Development of STEMM* related lesson plans and teaching materials that inspire and engage primary, intermediate, and secondary aged students. Teaching materials used should link to the key education objectives of Tōnui Collab, make connections to the NZ Curriculum, and celebrate localised curricula opportunities. Culturally sustaining teaching and learning pedagogies should be visible.
- Collaboration with team members to facilitate creative, innovative, culturally sustaining and active learning experiences for primary, intermediate, and secondary aged students and their whānau.
- Contributing to the collection of feedback and reporting required for programmes.
- Development of relationships with parents, whānau, schools and kura, marae and hapū and maintaining consistent, timely and professional communication kanohi ki te kanohi (face to face) and through pre-visit and follow up emails.
- Contributing to the development, scheduling, promotion, and delivery of School Holiday workshops and After School workshops.

KEY FUNCTIONAL RELATIONSHIPS

Internal

- Students
- Director
- Other team members

External

- Kaiako/Teachers me Tumuaki/Principals
- Whānau
- Community group leaders/administrators

HOURS PER WEEK

- This is a 32-36 hours* per week position
- Teaching will generally not exceed 20 hours* a week. The balance of the time is spent in preparation, research and development. * part time and job share options considered

DESIRED SKILLS:

- Teaching experience (formal or informal)
- Experience working with rangatahi and commitment to helping our rangatahi thrive
- Growth mindset
- High standard of communication skills
- Excellent organisational skills
- High degree of honesty and integrity
- Enjoys being around and encouraging tamariki and rangatahi to thrive
- Te Reo me ona tikanga Māori
- Experience working with teachers and/or hapū towards collaborative goals
- Effective time management skills
- Commitment to ongoing learning
- Full drivers licence
- Confidence in public speaking
- Adaptable and respectful team player

Programme Overview 2023

School Group STEMM wānanga (Year 0 - 13)

Since early 2022 Tōnui Collab has adopted a mobile strategy, taking the STEMM learning into the community, facilitating STEMM wānanga in schools, kura, marae and community spaces. Our wānanga use pūrākau (story) o te Tairāwhiti as the foundation for STEMM exploration - this could look like exploring the pūrākau of the Horouta waka voyaging from Hawaiki to Turanganui-a-Kiwa while learning computational thinking concepts or retelling the pūrākau of Whirikoka and his adventures with the sea animals out at Mangataikapua through animation, it could look like rangatahi developing computer games that celebrate the life of Te Maro or recreating a virtual experience that is reflective of Maia Poroaki's journey. STEMM applications range from animation to electronic engineering, digital art, game development to graphic design, coding and computational thinking, augmented reality to virtual reality.

As part of our mobile strategy, we set up at a school or kura for a week or multiple weeks to create STEMM learning opportunities for tamariki and rangatahi, this enables us to bring in resources and equipment.

School Holiday full day STEMM wānanga (7 - 13 years)

During the school holidays we invite 7+ year olds to create, construct, test and prototype. Our 9am - 3pm school holiday wānanga encourage children to explore the diversity of STEMM - science, technology, engineering, mathematics and mātauranga Māori through the experimentation and creation of digital art, music engineering, animation, electronic engineering, game development, robotics, coding, and virtual reality. We partner with local groups and community spaces to bring school holiday STEMM workshops to Te Tairāwhiti. In 2022 we ran our school holiday wānanga out of Lawson Field Theatre and ATAWHAI Youth Hub.

School holiday 3-day Marae-based STEMM wānanga (7 - 13 years)

During the school holidays, Tōnui Collab also partners with different marae in te Tairāwhiti to create unique marae-based STEMM* wānanga for rangatahi with connections to the marae. Over three days, hau kainga share pūrākau and waiata significant to the marae with rangatahi and with the support of the Tōnui Collab team, the rangatahi collaboratively design and develop a Virtual Reality experience that celebrates the marae, their tīpuna, or a significant pūrākau. Rangatahi are invited to experiment with various VR technology, to wānanga about the opportunities and threats technology presents us with, and to learn about education and career pathways in tech. Māori are under-represented in tech, it is time for the tech workforce to become more diverse and inclusive. During the marae-based STEMM Wānanga, whānau are invited to come and celebrate the efforts of the rangatahi and discuss education and career pathways. In 2022, Tōnui Collab partnered with three marae in te Tairāwhiti- Rangiwhao Marae, Pākōwhai Marae and Whangara Marae.

RAD Club (Year 7 - 13)

RAD (Recycle a Device) is an initiative that has been helping rangatahi to develop the skills to refurbish laptops and also helps address the digital divide as the refurbished laptops are gifted to rangatahi and whānau in the community where they are repaired. Having a laptop is critical to accessing education, services and participate in daily life, and RAD does this by encouraging kaitiakitanga. RAD sources unwanted laptops and diverts them from waste, rangatahi refurbish them, and then these fit-for-purpose laptops are gifted to whānau who need them most. Tōnui Collab have partnered with (Digital Future Aotearoa) and Remojo Tech - co-creators of RAD - to bring RAD to te Tairāwhiti. In 2023, we will be starting a RAD Club so that rangatahi can meet regularly to refurbish devices for our community.

Code Club (7 - 13 years)

Our after-school Code Club is in partnership with the HB Williams Memorial Library, it's a once a week workshop where tamariki aged 7 - 13 are invited to come along to explore and learn, create and problem solve as they experiment with a range of different programming languages and code games and other digital experiences. Tōnui Collab is committed to creating equitable opportunities for rangatahi in Te Tairāwhiti to thrive in tech. There is a digital divide that needs to be addressed and in 2023, our after school Code Club is free so that the barriers to learning are reduced. We are seeking to employ rangatahi to lead this programme.

Kōhine Robotics Club (Year 6 - 10)

Tōnui Collab is supporting teams of Year 6 - 9 girls from kura across Te Tairāwhiti to experiment with VEX IQ Robotics so that they might compete in the global VEX IQ Robotics competition. VEX Robotics hosts the world's largest robotics competition for students all over the world to compete against one another using a robot of their own design. Students need to practice teamwork, leadership, communications, and creative problem solving to participate. Tōnui Collab wanted to specifically address the disparity of kōhine Māori in tech, this collaborative initiative with Kiwibots and kura across Te Tairāwhiti will engage kōhine in robotics wānanga, practice competitions (scrimmages) and take a collective approach to mentorship and community building.

School Holiday STEMM workshops (all ages)

Our school holiday STEMM workshops are in partnership with the HB Williams Memorial Library, they are part of our reciprocal relationship that enables us to use their spaces free-of-charge throughout the term. During these one-hour workshops (two per school holiday) we invite tamariki and their parents/caregivers to experiment with 'unplugged' science and engineering challenges and activities.

POP-UP STEMM Activation Sessions

Outside of school workshops, after school workshops, and holiday workshops, Tōnui Collab also collaborates with other community activators to create STEMM learning opportunities for our tamariki, rangatahi and pakeke. Previously we have partnered with Tuia 250 and welcomed Hoturoa Barclay-Kerr and the waka Haunui team to share celestial navigation techniques. We have worked alongside Huia Pihema from Te Aitanga a Mahaki to share pūrākau about Mahaki with rangatahi and support them to create digitally-enhanced responses to the pūrākau. We have also created pop-up activations in collaboration with Te Tairāwhitri Arts Festival, and MātaiResearch.

Teacher Professional Learning and Development

Shanon is a Ministry of Education accredited PLD facilitator and Tōnui Collab collaborates with teachers to support the impactful adoption of digital technologies. Through professional learning and development partnerships, teachers are supported in developing the confidence to introduce emerging technologies into contemporary learning environments. In 2022 Tōnui Collab had PLD contracts with the following schools - Rere, Waikirikiri, Kaiti, Te Wharau, Patutahi, Mangatuna.