PRIME MINISTER'S SCIENCE PRIZES AOTEAROA NEW ZEALAND

MEDIA RELEASE – 31 May 2022

TE PUIAKI KAIWHAKAAKO PŪTAIAO SCIENCE TEACHER PRIZE

'Outside is the classroom' – a winning approach for students and nature

Burnside Primary School kaiako Bianca Woyak has won the Prime Minister's Te Puiaki Kaiwhakaaho Putaiao Science Teachers Prize for her success in engaging her students' enthusiasm in science with a wide range of local topics taught outside the classroom, encouraging them to embrace sustainability and to be kaitiaki in their community.

She specialises in facilitating student-led action projects that have a conservation community theme. The selection panel were impressed by her passion, enthusiasm and innovation in making learning meaningful for so many students.

Bianca's teaching embraces a 'hands on' approach including real-world learning with a local curriculum focus. This provides all students with opportunities to shine and to develop a wide range of observational, analytical, and practical skills. As a result, there has not only been large improvements in science learning outcomes, but also in other curriculum areas, not to mention improvements in the local ecosystem through the actions of the tauira students.

Bianca is employed as a full-time science specialist, teaching environmental science across the whole school from Years 1 to 6, which she feels very fortunate to be able to do. This has led to change to the whole school science curriculum to include local knowledge and learning. "It really puts an emphasis on our tangata whenua and their place in our curriculum and our history," Bianca says.

Bianca has led school activities in a large number of topics. These include testing water from the local stream, riparian planting, flax weaving from harakeke growing on site, beekeeping, citizen science projects with iNaturalist, waste management, bird studies including the annual Garden Bird Survey, and trapping and tracking as a predator-free school.

"Also, we do Garden to Table where we grow, harvest and cook with the veges and fruit that we get from the school.

"We are also growing native plants from seed and learning the importance of those to tangata whenua." Working with Eco Action Nursery, the thousands of native trees the students are growing are for planting into the red zone in Christchurch.

In addition to these activities, Burnside Primary is likely best known for its B5 Project 'Burnside Brings Back Boulder Butterfly', a local butterfly species.

The project started as the students were inspired about searching for insects and identifying them.

"They were looking at monarch butterflies and when they found out that they were a self-introduced species, helped by us planting swan plants, they wanted to know whether there were any endemic butterflies in Canterbury," Bianca said.

"I asked Ruud Kleinpaste and he talked to Brian Patrick, who's a butterfly specialist, and they told us about the boulder copper butterfly. It's endemic to Canterbury so is only found here, but it's really quite rare because we've destroyed their habitat. So the students decided that they wanted to bring the butterfly back."

They created a special habitat at the school and reintroduced the butterfly with a special welcoming ceremony with local iwi.

The butterflies have thrived at the school and so they are now working with other schools in the region to translocate the butterflies to as satellite sites.

The students also petitioned the local zoo, Orana Wildlife Park, to help with the butterfly. "They are creating a large garden and can educate the public about the boulder copper butterfly as well."

Bianca says having the butterflies at school has brought a new species of bird into the school for the first time – welcome swallows, who feed on them – but most importantly, the project has given the students a sense of making a difference through their actions.

"I think one of the biggest things is students knowing that they can make real change. It has also been inspiring for other teachers to know they can do similar things in their school grounds as well."

In addition to growing engagement and interest in her students, Bianca has also observed a growing respect for the school grounds and the land in her students.

"Getting them outside in nature and exploring nature and therefore appreciating it as well and looking at their local environment is really important. It's hugely inspiring to see the difference in the children who usually don't shine when they are inside the classroom doing regular learning. You get them outside, you get them doing hands-on things, and they come out of their shell and they see that they have things to offer the rest of the world and it's been really cool to see the change in the students."

Bianca's passion for teaching environmental science is driven by a desire to prepare her students for a difficult future where they can hopefully make a difference.

"Students are going to face huge challenges in the future with climate change. In order to get them to love and understand nature, you need to get them outside, have them valuing our precious taonga and understanding nature, so that in the future they can be leaders for change."

The award comes with a \$150k prize.

Mō Te Puiaki About the Prize

TE PUIAKI KAIWHAKAAKO PŪTAIAO SCIENCE TEACHER PRIZE

Awarded to a registered teacher kaiako who has been teaching science, mathematics, technology, pūtaiao, hangarau or pāngarau learning areas of the New Zealand curriculum to school-age children in a primary, intermediate or secondary New Zealand registered school or kura kaupapa.

This is one of five prizes awarded each year.

The Government of New Zealand introduced The Prime Minister's Science Prizes in 2009 as a way of raising the profile and prestige of science among New Zealanders, in Aotearoa and internationally.

www.pmscienceprizes.org.nz/