

# How local curricula are working

*Local curriculum is the way that we bring the New Zealand Curriculum to life for our students, and it looks different in every school. Local curriculum is about tailoring learning to build on the strengths, needs, and interests of our school community. Local curriculum includes, but is broader than geographical proximity – it is about making the learning relevant for our students in many ways. NZASE Science Communicator Mike Stone speaks to teachers in three schools.*

## Opihi College

Opihi College, a small school in Temuka, had challenges with behaviour and engagement in their year 9 and 10 classes. After much research and visiting schools which were trying different solutions, the school decided to focus on local curriculum.

Every teacher had to change the way they put together units, taking into consideration student needs and interests and drawing on the local area. They were asked to interweave literacy, numeracy, mātauranga Māori, and te reo and tikanga in all subjects.

Year 9 and 10 are combined and take a two-year program. In an interview with each student and their family, students choose six courses a term which each run for four periods a week. Students have to do a minimum of three science, three English and three maths courses each year to make sure they are laying the foundations for year 11.

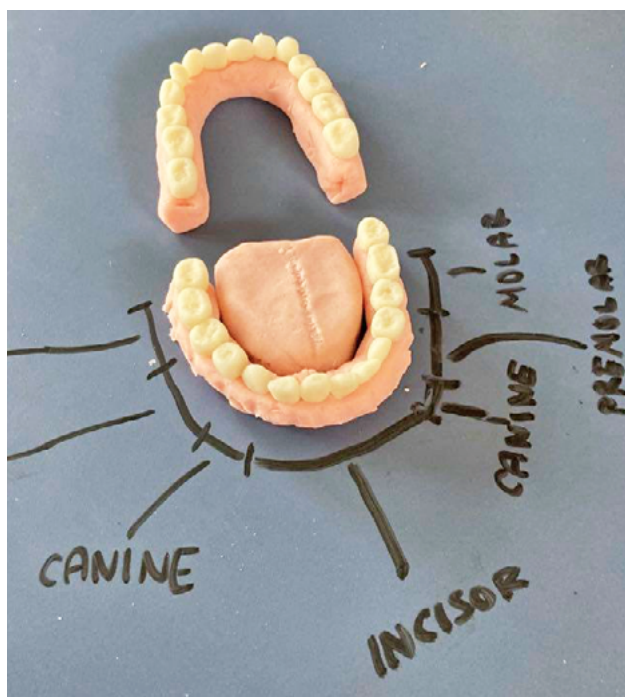
In 2021, science courses included: a unit based around the local bat population; and traditional methods of food preservation (both Māori and European). In 2022, courses include Sound of music (looking at sound, waves), Pirate science (shipwrecks, sailors' diseases, density), and Zombie Apocalypse (microbes).

Students are assessed on the development of their Nature of Science (NoS) skills. Science HoF Shelly Robson says "At the start we were horrified to find students were only achieving at L1-3 of the curriculum. But with a focus on developing the skills in each unit, the students lifted their game and by the end of the year were at L4 or L5. This focus on NoS is laying good foundations for the new NCEA assessments in level one science."

Principal Tony Robson says, "there were fewer roadblocks than expected. Some staff were cautious; we ensured they were listened to, their questions answered and support provided to help them make the necessary changes." PLD facilitator Judith Bennetts worked alongside teachers helping with the

*Lake Brunner School students in the bush – a great way to start the week. Shirley Serban.*

OC students learnt about the parts of the mouth in a unit on locally-made food (vinegar and dairy factories). Shelley Robson.







*Opihi College students dissecting hearts as part of a unit critiquing health advice. Shelley Robson.*

development of new units for all subjects.

The principal is re-establishing links with mana whenua – COVID restrictions prevented the year

starting with a day on the marae.

The feedback from students and teachers has been positive. Students enjoyed the choice and the change of classmates. Tony said students were more engaged and behaviour was less of an issue. Judith noted that teachers were not blaming students, but looking for what they could do differently. Teachers reported a renewed enthusiasm because students were more engaged.

## Taita College

Sujata Rajagopal, HoF at Taita College, has been leading a project to re-engage students, 60 percent of whom are Māori. Science and te reo teachers worked together, experimenting with project-based learning to improve student engagement, with a focus on sustainability and kaitiakitanga.

One of her projects has been restoring a wetland at the back of the school, with funding from the Teacher Lead Innovation Fund. To start, Mountain To the Sea ran a bioblitz to discover what was there. Then students from her school, as well as Koraunui Primary and Avalon Intermediate, removed rubbish, dug out blackberry, trapped pests,

*Students and teachers from Taita College with River Ranger Travis Moody. Sujata Rajagopal.*



tested water quality and replanted hundreds of wetland-loving native plants.

Students set up a monitoring station to provide an ongoing check on the impact of their work. The data is showing an increase in both the number and variety of living things in the wetlands, with inanga, banded kokopu, and young tuna returning to the valley. On a rainy day the chorus of frogs can be heard all over the school.

Student engagement increased significantly, as evidenced by many of them choosing to go to the wetlands in their own time. They learned about a range of scientist roles. And senior science and te reo students gained extra credits from assessment tasks designed for them in the context of this work.

## Lake Brunner School



Shirley Serban is the principal at Lake Brunner School, a small rural school near Greymouth. “Our students mostly live on farms and have a connection to the land and to the local environment.” The school is strongly focussed on linking to the local area.

Every Monday morning, weather permitting, the whole school goes into the bush for an hour of free play. This experience generates questions and discussion, which teachers follow up on in class. Older students have taken an interest in predator control. After one day’s discussion, a student (not the most confident writer) showed his teacher a heartfelt letter he had written off his own bat asking for DoC help in setting up a trapline.

*Lake Brunner School students fishing like Kahu; making rods, lines and hooks out of natural materials, and trying to catch something in the lake. Shirley Serban.*



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“We have a range of confidence with teaching science and it was helpful to have Judith Bennetts provide some PLD to help us unpack the local curriculum,” says Shirley.

The learning is integrated across subjects, with a prevailing inquiry approach. “Students drive it and it doesn’t matter if teachers don’t know – we find out together how things work.”

Students are put into houses named for local historic figures who exemplify school values: Raureka (credited with finding the local path through the alps), Brunner (an early explorer) and Kehu (his guide). “Survival and bushcraft is an important focus for us.”

Links with mana whenua are a work in progress. “There are a lot of schools wanting help, but we need to develop reciprocal relationships where we’re not just taking, but contributing in meaningful ways as well. Staff are in high demand and they need to look after their own people first – totally understandable. However, we are weaving in local stories that mana whenua want children to learn about, hence the house names, and focusing on using local language for things. It’s a good start,” says Shirley.

One of the key things that was helpful was extensive consultation with the community. Teachers also had to let go of their fear of not covering the curriculum, as Shirley says “we will cover what is important as we are responsive to the community and to students.”

The staff are enjoying the joy and freedom local curriculum gives, “lifting our heads out of the books and looking at what is around us,” as Shirley says.



*Above: Older Lake Brunner School students manage a trapline for DoC, checking traps and recording their catch.*

*Below: Hut building - these huts are worked on over months during weekly bush visits. Photos: Shirley Serban.*



### Ngā Kupu

**ā-rohe** – Local (adj.)

**īnanga** – Whitebait

**Kahui ako** – Community of learning

**Konihi** – Predator

**Kūkūwai** – Wetland, swamp

**Pakirehua** – Inquiry

*Te Aka Maori Dictionary*



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