



Overview

This non-fiction article is based on the work of Pātaka Moore of Te Wānanga-o-Raukawa in Ōtaki. In a talk to local students, he explains the history and significance of the Mangapōuri Stream. He also discusses how the stream, which is now unhealthy, might be restored. The article has a strong environmental message, as well as information on the importance of streams to Māori, with particular reference to tuna (eels).

The article has a strong Māori viewpoint and may have special significance for Māori students. It provides opportunities for all students to be exposed to traditional mahinga kai activities (the use and care of natural resources) and kaitiakitanga (guardianship of natural resources).

Texts related by theme

“Tiakina a Tangaroa – Protect Our Seas” SJ L2 Oct 2011 | “What a Disaster!” SJ L2 Aug 2012 |

“Save Our Sand Dunes” SJ 2.3.10

Text characteristics from the year 4 reading standard

a straightforward text structure, such as a structure that follows a recognisable and clear text form

some words and phrases that are ambiguous or unfamiliar to the students, the meaning of which is supported by the context or clarified by photographs, illustrations, diagrams, and/or written explanations



Why is the stream important?

From early times, Māori lived on the banks of the Mangapōuri Stream. The stream was a source of fresh, clean water for drinking and bathing. It was also an important source of food. Inanga (whitebait), tuna (eel), kōura (freshwater crayfish), and kōkopu (native trout) all lived in the stream in large numbers.

Māori also used the stream as a sort of “fridge”. The cool water was a good place to store kai, including the much-loved kānga wai (fermented corn). The corn was put into the water in baskets and boxes to keep it cold and fresh. Tuna were also stored alive in the stream until it was time to eat them.

Tuna were a very important part of the Māori diet because they are such a good source of protein. Every year around December, Māori would prepare their tuna boxes and repair their nets to get ready for the tuna heke. This is the time in autumn when adult tuna swim out to sea to breed. The tuna heke usually happens over one or two nights during an autumn rain.



Fat tuna!

Adult tuna swim thousands of kilometres to lay their eggs in the warmer waters of the South Pacific, and then they die. The journey can take them several months. After the eggs hatch, the tiny tuna float back to New Zealand on the ocean currents.

The adult tuna do not eat at all during the entire journey. Instead, they rely on fat stored inside their bodies to keep them going. This means that when the tuna are caught and stored in the stream, they don't have to be fed.



some compound and complex sentences, which may consist of two or three clauses

some places where information and ideas are implicit and where students need to make inferences based on information that is easy to find because it is nearby in the text and there is little or no competing information

other visual language features that support the ideas and information, for example, text boxes or maps

Possible curriculum contexts

SOCIAL SCIENCES (Social Studies)

Level 2 – Understand that people have social, cultural, and economic roles, rights, and responsibilities.

ENGLISH (Reading)

Level 2: Structure: Show some understanding of text structures.

ENGLISH (Writing)

Level 2 – Structure: Organise texts, using a range of structures.

Possible reading purposes

- To learn why a particular stream is important and how it is being cared for
- To learn about the concept of kaitiaki and why it is important
- To learn about the life cycle of tuna and their long migrations.

See *Instructional focus – Reading* for illustrations of some of these reading purposes.

Possible writing purposes

- To recount a personal experience of gathering kai (for example, from a stream, river, the sea, or the land)
- To describe another example of kaitiaki (for example, care of a local area) and how it is applied
- To describe a concept from another cultural perspective.

See *Instructional focus – Writing* for illustrations of some of these writing purposes.

Text and language challenges

VOCABULARY:

- Possible unfamiliar words and phrases, including “waterwheel”, “mill”, “ground”, “fermented corn”, “waterways”, “handed down from generation to generation”, “guardians”, “future generations”, “respect”
- Māori names
- The use of te reo Māori with English explanations
- Words related to environmental issues, including “polluted”, “fertiliser run-off”, “replant”
- The use of “grew” to describe urban development over time.

Possible supporting strategies

Familiarise yourself with any Māori words that are new to you. Depending on your students’ knowledge, provide support for pronunciation and meanings. Use the Ngata Dictionary (www.learningmedia.co.nz/ngata/) or work with your school community or iwi.

With the students, make a list of the foods, including their Māori and English names and if possible, drawings or photographs. Encourage students to add to the list from their own knowledge.

Before reading, preview any words that you think will be unfamiliar to your students. You could use strategies such as a vocabulary jumble to preview key vocabulary. See ESOL Online for a description of this strategy <http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Pedagogy/ESOL-teaching-strategies/Vocabulary/Vocabulary-jumble>

The English Language Learning Progressions: Introduction, pages 39–46, has useful information about learning vocabulary.

SPECIFIC KNOWLEDGE REQUIRED:

- Familiarity with kaitiakitanga: caring for and protecting the environment
- Familiarity with streams, rivers, or the sea as places to swim, fish, or play
- Understanding that, over time, development can damage environments
- Knowledge of the causes of pollution and how it can be reversed
- Knowledge of animal life cycles and how they can be harmed
- Understanding of how people can work together to protect the environment.

Possible supporting strategies

Review the students’ knowledge of the cultural concepts in the article. Activate their background knowledge, helping students make connections with their own experiences.

For students who don’t have experience of gathering food, especially from rivers or streams, you could show images and ask others to share their stories. Record and feed in key vocabulary.

The students may need support to understand the size of the Pacific Ocean and to appreciate the incredible journey made by adult tuna. They may also need further explanation of the fact that adult tuna don’t have to be fed while in the storage boxes: these tuna would be fat in preparation for their big migration.

TEXT FEATURES AND STRUCTURE:

- The title and introduction
- The main text is part of a speech to students
- The focus on one stream
- The use of questions as headings
- The historical information
- The tuna life cycle and descriptions
- Descriptions and explanations
- The bulleted list of reasons the stream is unhealthy
- Direct quotes from students about the stream
- The whakataukī (proverb) with an English translation and explanation.

Possible supporting strategies

Find Ōtaki on a map. (On a satellite map, the line of trees to the north of Mill Rd indicates the stream.) Discuss the settlements and the impact that towns and farming might have on the environment.

Discuss the title and its meaning, inviting students to share their knowledge. Skim the article with the students to identify the headings. Ask them to think, pair, and share to predict the information after each heading. Record and feed in key vocabulary and concepts during the discussion.

Supporting English Language Learning in Primary Schools: A Guide for Teachers of Years 3 and 4 (Explaining pages 32–38) provides some useful information on working with explanations. For more information about this resource and PDFs of the booklets see ESOL Online at: <http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Reviewed-resources/Supporting-English-Language-Learning-in-Primary-School-SELLIPS>

Instructional focus – Reading

Social Sciences (Level 2 – Social Studies: Understand that people have social, cultural, and economic roles, rights, and responsibilities.)

English (Level 2 – Structure: Show some understanding of text structures.)

Text excerpts from “Kaitiaki of the Stream”

Students (what they might do)

Teacher (possible deliberate acts of teaching)

Pātaka Moore (Ngāti Pareraukawa, Ngāti Raukawa) has a strong interest in the environment. He is studying the Mangapōuri Stream, which flows through his hometown of Ōtaki on the Kāpiti Coast.

The students use their knowledge of tikanga and of iwi affiliations to understand that Pātaka belongs to the two iwi. They make connections between their own knowledge of iwi and the text to place where Pātaka is from. They identify the area on a map.

ASK QUESTIONS about the purpose of the introduction.

- Why does the article start like this?
- Why are Pātaka’s iwi named?
- How does the introduction set the scene for the rest of the article?

Three marae grew beside the stream, along with the township of Ōtaki, and a number of schools. A mill was also built nearby. It used the water to drive a large waterwheel, which ground wheat to make flour.

The students recognise “grew” and draw on prior knowledge of development to understand its use in this context. They use knowledge of words with different meanings to understand “ground” and infer the description is of a much earlier time. They ask questions about why the stream became polluted.

MODEL how to use vocabulary strategies.

- When I read “Three marae grew ...” I wondered if it was a mistake – then I read on and realised it means the population of the marae and the area got bigger.
- What did you think when you saw “ground”? How did the context help you to work out the meaning? What is the present tense for the verb “ground”? (grind)
- I also had to think about “waterwheel”. What clues and prior knowledge helped you understand what it means?

Some students, especially English language learners, may not have the knowledge of vocabulary and verbs forms or the background knowledge to be able to answer these questions. For these students, drawing their attention to the items, giving explanations, and providing further examples may be more useful.

Why is the stream important?

From early times, Māori lived on the banks ... bathing.

It was also an important source of food. Inanga (whitebait), tuna (eel), ... all lived in the stream in large numbers.

The students infer that Māori needed access to clean water in early times because there were no taps. They infer that a ready supply of fish was important when there were no shops. They wonder why this changed and make predictions about why and when the stream became polluted.

PROMPT the students to ask questions as they read.

- Make a note of your questions at the end of each page or section. This will help you to focus on looking for answers. What questions do you have so far? Share these with a partner. Are your questions the same or different?

What’s happened to the stream?

Today, the Mangapōuri Stream isn’t as healthy as it used to be. People can’t bathe or swim in the water, and there’s much less food in the stream.

The students make connections to infer that something has happened to the stream. They draw on their prior knowledge about pollution to infer the reasons for this. They wonder what it would be like to have no clean water and fresh food and ask questions about what could be done.

ASK QUESTIONS to prompt prior knowledge.

- What do you already know about the kai mentioned here?
- Have you ever collected kai (mahinga kai)? Where have you done this?
- Where does your clean water come from?
- Where does your food come from?
- What comparisons can you make between the text and where you get food/water?

Invite volunteers to share their experiences. Try to include a range of examples to show the diversity in the class and to highlight how we rely on services and shops.

DIRECT pairs to discuss where they get food and water.

- What changes in the environment could change your sources of food and water?
- Who is responsible for making sure your food and water are safe and healthy?
- In this text, how do you think the stream became so unhealthy? What clues did you use?
- What could be done to fix it?

Mā pango, mā whero, ka oti aite mahi

When we co-operate and work together, we can get the job done.

(If we all work together, we can restore our streams.)

The students identify the extract as a whakatauki, making connections between their own experiences and the text to infer that it is used because it is a customary way to end a story. They use their knowledge of te reo Māori and/or English to understand the literal and specific meanings, drawing on their experiences of working together for a common purpose.

EXPLAIN (if necessary) that this is a whakatauki or proverb and that speakers often end a speech by giving a whakatauki about the topic.

- Why are there two slightly different English versions? Why do you think one is in brackets?
- What experiences do you have of hearing, reading, or using whakatauki?
- Why is this a good way to end the article?

GIVE FEEDBACK

- You wrote down questions as you were reading and checked them as you read on. I could see that was helping you to stay focused.

METACOGNITION

- If any part of the article was difficult to understand, tell me about it. What made it difficult? What did you do to help yourself understand it?
- What strategies helped you most as you were reading? Share an example to show us where and how you used the strategy.

 Reading standard: by the end of year 4

 The Literacy Learning Progressions

 Assessment Resource Banks

Instructional focus – Writing

Social Sciences (Level 2 – Social Studies: Understand that people have social, cultural, and economic roles, rights, and responsibilities.)

English (Level 2 – Structure: Organise texts, using a range of structures.)

Text excerpts from “Kaitiaki of the Stream”

The stream is very polluted. Pātaka is talking to people about the importance of the stream and the ways that it might be made healthy again. Recently, he spoke to a group of local students ...

Fat tuna!

The adult tuna do not eat at all during the entire journey. Instead, they rely on fat stored inside their bodies to keep them going. This means that when the tuna are caught and stored in the stream, they don't have to

There are a number of reasons why.

- Storm water pollution: This is the rainwater that comes off the roads and washes into the stream. It carries poisons that are not good for the stream's health.
- Bush removal: Much of the bush that was once beside the stream has been removed ...
- Fertiliser run-off: ...

Don't litter. When we leave rubbish behind, some of some if it can find its way into our streams. Litter is not good for the health of a stream and the life in it.

Examples of text characteristics

SETTING THE SCENE

An introduction may give a very brief summary of what an article will be about.

ELLIPSIS

An ellipsis usually indicates that some words have been left out, but it can also be used like a colon to introduce a new idea.

FACT BOX

Authors sometimes insert extra information in a fact box. This is often in a different voice or style from the main text: it may use scientific terms and be more precise.

BULLET POINTS

Putting related pieces of information into a bulleted list makes the information clearer. The items in the list have something important in common. This is shown in the words that introduce the list.

IMPLICATION

For a reader to infer, an author needs to imply ideas in their writing. Sometimes this means giving facts and assuming the readers will add their own knowledge to infer a connection between the facts.

USING QUOTES

Using quotes from people who have strong opinions makes the text engaging and real.

METACOGNITION

- What structure have you used to organise your information? Why? What models helped you decide on this structure?
- How did asking experts help you find information? What impact do you want their words to have on your readers?

Teacher (possible deliberate acts of teaching)

ASK QUESTIONS to help the students plan their writing.

- What strategies are you using to plan and organise your writing?
- How will you “set the scene”? Will you let your readers know what to expect, or will you engage them in some other way?
- What structures will you use?
- What examples, illustrations, diagrams, or other visual features will you use?

For students who need support with planning, use a simple writing frame. Work with the students to complete the outline, then check that they are using it as they write their draft. Some students may benefit from guided writing to scaffold them into independent writing. See ESOL Online for more information about guided writing <http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Pedagogy/ESOL-teaching-strategies/Writing/Guided-writing>

PROMPT the students to examine models.

- What extra information do you want to give your readers?
- Where will it fit? What visual features will you need to include?
- Look through several School Journals to find places where authors have used fact boxes. What kind of information do they give? Does the writing “sound” different, for example, because it uses scientific terms? Can you use one as a model for your writing?

EXPLAIN that bulleted lists are a useful way to show a set of related details.

- A bulleted list may be easier for a reader to understand than a long complex paragraph. You can then add details to each bullet without confusing the readers.

MODEL changing a long sentence into a list. Write this sentence on the board: “The stream isn't healthy because of storm water pollution, bush removal, and fertiliser run-off.” Show how this can be turned into a bulleted list, explaining the changes you make to words (delete “and”) and punctuation (add a colon after “of” and delete the commas). Work with individual students to help them identify any parts of their writing that could be improved with a list. Make sure the items are related and are introduced with a common stem.

EXPLAIN how facts can be used to imply wider meanings.

- The facts in this extract show how changes in the environment have made stream unhealthy.
- What do you infer about why the stream has become unhealthy? What has changed?
- Why is it sometimes better to imply, rather than tell the reader directly?
- What do you want your readers to infer from your information?
- Reread to make sure you're implying, not telling them directly.

ASK questions about sources of information.

- Who knows a lot about your topic?
- Who has strong opinions about your topic?
- Can you use some direct quotes from a one or two people?
- Remember to keep it short and use their actual words.

GIVE FEEDBACK

- You've chosen a nice clear structure. Your structure made it easy to follow the ideas.
- The fact box shows exactly how ... This helped me to understand why ...

 **Writing standard: by the end of year 4**

 **The Literacy Learning Progressions**