



Overview

Polynesians have travelled vast distances in canoes for more than three thousand years, resulting in many settlements across the Pacific. In "Explorers of the Sunrise", the first article recounts a recent voyage from New Zealand to Rapanui and back, using traditional navigation methods.

The second article describes Polynesian travel, from the earliest migrations to modern-day air travel.

Read together, the articles provide opportunities for students to ask questions then locate, evaluate, and synthesise information to meet their reading purposes. Complex information is well-supported by explanations and illustrations, including maps that show voyages and wind movements, diagrams that explain swell patterns, and close-up drawings of constructions.

Texts related by theme "Te Waka" SJSL 2006 | "Where No Boat Could Live" SJ 3.3.10

Text characteristics from the year 8 reading standard

adverbial clauses or connectives that require students to make links across the whole text

complex layers of meaning, and/or information that is irrelevant to the identified purpose for reading (that is, competing information), requiring students to infer meanings or make judgments

sentences that vary in length, including long, complex sentences that contain a lot of information

NAVIGATION

The best Polynesian navigators are remembered as great heroes. For example, right across Polynesia, people still tell legends about Māui. The Māori people respect him as a great navigator with ability to "fish up" islands from below the horizon.

WORKING THE WINDS

In Polynesia, the wind blew mostly from the east. But the Polynesians knew that at certain times of the year, the wind blew from the west. They wanted to travel to the east. So, when this happened, they would set off. These westerlies would not last long – just long enough to carry a crew hundreds of kilometres to the east. When the wind changed back to an easterly if the crew had found no land, they could sail back home. This way of working the wind made exploring much safer.

Wind directions in the South Pacific.

FINDING YOUR WAY BY SKY AND SEA

The Polynesian navigators were experts in the movements of the Sun, the Moon, the stars, and the planets. They used this knowledge to guide them on long voyages. They also used ocean swells to find their way. When a swell divides and curls around an island, it creates a pattern in the ocean. The navigator was able to detect this pattern some distance away from land. Swell patterns were useful because they could be used during the day, and on cloudy nights when the navigator couldn't see the Moon, the stars, or the planets.

Ocean swells dividing and curling around an island.

FISHING UP ISLANDS

When an island was still below the horizon, Polynesian navigators used many clues to find it. In the early morning, birds fly away from land to catch fish, and in the late afternoon, they fly back towards it. Watching these birds helped the navigator to find land up to 80 kilometres away. Floating debris (such as leaves or tree branches) was another clue that land was nearby.

metaphor, analogy, and connotative language that is open to interpretation

illustrations, photographs, text boxes, diagrams, maps, charts, and graphs, containing main ideas that relate to the text's content

academic and content-specific vocabulary

Possible curriculum contexts

SOCIAL SCIENCES – Social Studies

Level 4: Understand how exploration and innovation create opportunities and challenges for people, places, and environments.

Level 4: Understand how people pass on and sustain culture and heritage for different reasons and that this has consequences for people.

ENGLISH

Level 4 – Ideas: Show an increasing understanding of ideas within, across, and beyond texts.

Possible reading purposes

- To read about an exciting voyage in a traditional waka
- To learn about the voyages of early Polynesians
- To understand the effect Polynesian travels had on developing different communities and cultures
- To compare sea journeys from long ago with a modern sea journey.



The Writing Hub

Text and language challenges

VOCABULARY:

- Possible unfamiliar words and topic-specific vocabulary, including “waka-builder”, “last leg”, “ocean swells”, “eastwards”, “spiritual”, “homeland”, “deeds”, “settled”, “duties”, “tending”, “westerlies”, “easterly”, “detect”, “debris”, “crossbeams”, “stern”, “catamarans”, “complex”, “ancestors”, “descendants”, “origins”
- Use of Māori and Pasifika languages
- The word families: “navigation, navigate, navigators” “voyage, voyagers, voyaging”
- The metaphor: “fish up” islands
- The expressions: “an art and a science”, “key to this strength”.

Possible supporting strategies

Identify vocabulary that may be challenging for students. Use strategies to support them such as:

- providing opportunities to meet words through oral language before reading
- reviewing how to use a glossary
- reviewing how to check the context for explanations
- brainstorming topics and/or concepts to elicit topic-related words and co-constructing word lists and word webs
- helping the students make notes in their (or the class’s) vocabulary notebook about key words and phrases, for example, definitions, translations (if appropriate), word families, synonyms, and/or collocations (words that go together).

Use the strategies alongside pre-reading activities for exploring the topic and building prior knowledge. *The English Language Learning Progressions: Introduction*, pages 39–46, has some useful information about learning vocabulary.

SPECIFIC KNOWLEDGE REQUIRED:

- Knowledge of Pacific geography and history, including knowledge of the island nations in the Pacific
- Awareness of the similarities of, and differences between, the many peoples of the Pacific
- Knowledge of wind-powered vessels, including waka
- Understanding that over time groups of people have travelled long distances across the oceans for a range of reasons
- Understanding of weather and seasonal changes
- Understanding and imagining the conditions of a long sea voyage on a canoe or waka.

Possible supporting strategies

Provide opportunities for students to discuss the central topic: long Pacific voyages in waka.

Check for relevant prior knowledge, for example, of waka, sea voyages, countries in the Pacific, travelling between countries, enduring hard conditions. Where necessary, support students with the prior knowledge needed for reading and build shared understandings.

For further information, visit The Science Learning Hub at www.sciencelearn.org.nz/resources/619-the-waka-tapu-voyage.

Make a KWL chart to record what students know about early Polynesian voyaging and what they learn from the text. Use the chart before, during, and after reading, reviewing it and making changes as information is processed.

Invite students, families, or other teachers to share any relevant experiences. Students who belong to one of the cultures mentioned or who have travelled between New Zealand and the islands could also share their experiences of the similarities and differences between cultures.

TEXT FEATURES AND STRUCTURE:

- Two related non-fiction articles: one is a recount; the other is a report containing explanations and descriptions
- Information about modern-day and historical sea voyages
- A range of verb forms (for example, “sailed”, “had been”, “is”, “sits”, “had completed”, “were always travelling”, “would eat”, “have never stopped”, “speak”)
- Time and sequencing language (for example, “In 2012”, “During the journey”, “in the daytime”, “At night”, “When that happened”, “While they waited”)
- Technical information about navigation and waka and their construction
- Photos, illustrations, maps, diagrams
- Headings and sub-headings
- Glossary
- The use of a comment and a question to engage the reader (page 4).

Possible supporting strategies

For both articles, support students to identify similar features from other articles, for example, the visual features, headings, and style of writing. Preview the texts to help students make links between them. Model how you use the headings to keep track of the main ideas and to locate information.

Point out the maps, diagrams, photos, and glossary and demonstrate how to use them. Students may need support to interpret the maps on pages 3 and 10.

Students will need to understand the signals of time and sequence, including the verb forms. Ask questions to check their understanding and provide support if necessary.

Students who will find the texts challenging may benefit from extensive previewing before reading. Give the students a brief outline of the text before or during the preview. They could then pose questions about the journeys, based on the images, maps, diagrams, and headings so that when they are reading, they are looking for specific information that either answers their questions or raises more questions.



Sounds and Words

Instructional focus – Reading

Social Sciences

(Social Studies, level 4: Understand how exploration and innovation create opportunities and challenges for people, places, and environments.)

(Social Studies, level 4: Understand how people pass on and sustain culture and heritage for different reasons and that this has consequences for people.)

English (Level 4: Show an increasing understanding of ideas within, across, and beyond texts.)

Text excerpts from *Explorers of the Sunrise*

Students (what to prompt, support, and look for as the students are reading)

Teacher (possible deliberate acts of teaching)

[page 3] During the journey, the navigator had to use all his skills and knowledge to locate the island of Rapanui.

[page 5] The last leg of the voyage to Rapanui was a big test for the navigator ... He used many clues, such as the flight of birds and the ocean swells, to help him.

[page 11] When a swell divides and curls around an island, it creates a pattern in the ocean. The navigator was able to detect this pattern some distance away from land. Swell patterns were useful because they could be used during the day and on cloudy nights when the navigator couldn't see the moon, the stars, or the planets.

...

In the early morning, birds fly away from land to catch fish, and in the late afternoon, they fly back towards it. Watching these birds helped the navigator to find land up to 80 kilometres away.

DEMANDS OF THE TEXT

Students need to:

- draw on their prior knowledge about the movement of the sea and of birds
- identify and access relevant prior knowledge to make connections as they read
- make links between different parts of the text that cover similar information
- visualise the swells and the birds' flight.

On a first reading, students ask questions about the challenges of long-distance voyages. They draw on prior knowledge and information in the text to make inferences about the challenges of the Polynesian voyages.

The students make connections between the text and their prior knowledge about journeys or challenges to understand the metaphor "last leg". They ask questions and locate information to understand why it was "a big test".

The students ask questions about the kinds of skills and knowledge navigators needed. They make connections between the text and their knowledge of the sea and birds to infer that the navigators used changes and patterns in sea and bird movements to find their way.

On a second reading, or when they reach page 11 on a first reading, the students make links between pages 5 and 11 as they locate information. They use the diagram and their prior knowledge of the way waves move around a rock or other obstacle to evaluate the effectiveness of using ocean swells as a way to find land.

The students ask questions to understand navigating at night or on cloudy days. They infer that the swell patterns are visible at night.

They make connections between the text and their knowledge, and with support, they locate, evaluate, and synthesise the information and think critically about the skills of the navigators.

PROMPT the students to think about challenges as they read.

- As you read this book, think about what has changed over time.
- What challenges did travellers face when the only way to travel long distances across the sea was by canoe?
- How did Polynesian travellers deal with these challenges?

DIRECT students to keep a note of their questions as they read.

PROMPT the students to make connections to work out an unfamiliar phrase.

- Remember to connect an unfamiliar word or phrase to what you already know. Let's look at that phrase "the last leg". I've heard this phrase to describe stages of a race, like a yacht race or a triathlon. Where have you heard this phrase before?

MODEL the kinds of questions that increase the students' understanding.

- I also wondered about the navigator's skills. My questions are: "Why would being below the horizon make it tricky?" "How could birds and ocean swells help the navigator find the island?" I've written these questions down, and I'll look for specific information that answers them as I read.

ASK QUESTIONS to support the students' critical thinking.

- As you read the second article, did you find answers to your questions from the first article? How helpful was the information?
- How does the information on page 11 help answer some questions?
- What features of ocean swells make them useful for navigation?
- What experiences helped you understand the water movement?
- What did you already know about seabirds that helped you follow this explanation? How reliable would bird movement be for navigating?
- Thinking about all the sources of information they used, how would you evaluate the skills of Polynesian navigators? Were they experts?

GIVE FEEDBACK

- You used what you knew about the sea, and you reread parts of the text to make sure you understood how ocean swells helped the navigators.
- Your questions helped you focus on locating information to find answers – were they all answered? How could you find any other answers?
- You made connections to your knowledge about keeping a boat on a steady course, and then you evaluated whether the information was useful for answering your questions about what skills the navigators needed. Let's synthesise the different pieces of information to say what we think it would have been like to be a navigator back then.

MONITORING THE IMPACT OF TEACHING

- To support students who struggle to synthesise information, ask them to locate all parts of the text that mention navigation. Write these on the board, and then model how you consider each piece separately. Then put them together to form an overall picture. Point out that good readers are doing the same thing with information that the navigators do: they synthesise several different pieces of information to gain a deeper understanding. You could use a graphic organiser (see below) to support your modelling and to help students synthesise and summarise (columns 1 and 2 would be filled in for each part, while three would be filled in once).

Information from the text	Key points	Overall summary

Text excerpts from *Explorers of the Sunrise*

Students (what to prompt, support, and look for as the students are reading)

Teacher (possible deliberate acts of teaching)

[page 3] Being on the waka was a lot of fun, but not when it got stormy!

[page 4] Can you imagine sitting on a waka, cold and wet, with no way of getting off for forty-three days?

[page 9] What was it like to be on one of the great voyaging canoes? The navigators and the crew worked the hardest ... Everyone else had duties too. These included repairing the ropes and the sails, fishing, preparing food, and tending to the plants and animals. A canoe of Polynesians was well-organised – ready to find and develop a new world.

DEMANDS OF THE TEXT

Students need to:

- identify the different voices of the two texts
- draw on their knowledge of working together with others to understand living on the canoe for many weeks
- put themselves “in other’s shoes” to imagine what the canoe voyage would be like
- draw on their experiences of being part of an organised event (such as a school camp, a sports event) to understand the concept of “well-organised” and the benefits of good planning.

The students **make connections** between the text and their prior knowledge of being on the sea to **visualise** long-distance travel in a canoe. They **ask questions** and locate information across the two articles to **evaluate** information across the text.

The students **think critically** about the challenges of canoe travel, and with support, **synthesise** information about the voyages to make inferences about the conditions and the importance of planning and organisation. They make **inferences** about the hardships that people were willing to put up with to travel to a new place.

The students **form hypotheses** about the reasons Polynesians travelled so far and so often. They read on to locate information that could confirm or change their thinking.

DIRECT the students to work in pairs.

- Talk about any experiences you have of being at sea. Where were you? What kind of boat were you in? What was it like?
- Imagine being on a canoe with dozens of people for weeks. What would make it hard? What would help make it easier?

ASK QUESTIONS

- How did thinking about being on a canoe help you to understand these parts of the text?
- Using your experiences and information in the text, what can you infer about life on a canoe during a long sea voyage? What would be the biggest challenge?
- What does “well-organised” mean in this context? Why would it be important to be well-organised?

MODEL forming hypotheses.

- When I read about the challenges of canoe travel, I wondered why Polynesians long ago travelled so much. I know that the islands were not big and growing enough food for lots of people probably got harder and harder. So my hypothesis is that they ran out of room in their home islands and had to find another place to live. As I read on, I’ll look for information that could confirm or change my hypothesis.

TELL the students to share their hypotheses with a partner, and check them as they read on.

GIVE FEEDBACK

- I noticed you were sharing experiences and asking each other questions, which helped you understand more about sea voyages. Sharing our knowledge and clarifying what the other person is saying are good ways to learn more about a topic.
- You’re asking some excellent questions. Your hypotheses are helping you to think about the answers as you read.

MONITORING THE IMPACT OF TEACHING

- If students’ lack of relevant experiences limits their ability to make connections with the text, provide resources to build this before reading. If relevant, ask them to share experiences from their own cultures that could have parallels with the articles.
- Check students’ accuracy and fluency by asking them to read the paragraph aloud. Take note of strategies you will need to teach, and work on these during reading. It may be helpful to read the text aloud as students listen and follow along. Pause for discussion and questions at the end of each section. Students can then attempt each section independently.

Text excerpts from *Explorers of the Sunrise*

Students (what to prompt, support, and look for as the students are reading)

Teacher (possible deliberate acts of teaching)

[page 6] This is where Polynesian culture first began. The peoples of Hawaiki were not all the same, but they had similar customs and languages. They kept in regular contact, trading goods and ideas, and like their ancestors, they were skilled voyagers.

[page 7] The Polynesians began to settle on islands that were many hundreds of kilometres away, for example, Niue, Tuvalu, and Tokelau ... Meanwhile, those people who stayed behind in Hawaiki were making a different kind of journey. They were becoming Tongans, 'Uveans, Futunans, and Samoans. People, languages, and cultures were changing!

[page 14] No one really knows why the Polynesians began voyaging.

[page 15] Since the end of the Second World War, many thousands of Polynesians have moved away from their villages.

... Modern Polynesians are the descendants of Hawaiki. They remember their origins in many ways – in their languages, songs, dances, stories, and designs.

DEMANDS OF THE TEXT

Students need to:

- make connections with their own experiences
- make links and connections with information across the text
- ask questions, then locate and evaluate information
- synthesise new information with their prior knowledge to understand concepts
- make inferences using their prior knowledge and information in the text.

The students **make connections** with what they know about Polynesian culture and how it spread across the Pacific. They **ask relevant questions**, for example, *how and why cultures changed and what things stayed the same.*

The students **make links** between sections of the text as they locate information that answers their questions. They **evaluate and synthesise** this information, considering it in the light of their prior knowledge, to **infer** why Polynesians travelled. They **make comparisons** with what they know about people moving between countries to **infer** that as people move, they learn new ways of living, but they retain many aspects of their old ways.

The students **make connections** between the text and their personal experiences of being Polynesian or of living in a multicultural community to **evaluate** the reasons why traditions have been retained. With support, they **synthesise** ideas across and within the text and from their own experiences to understand the many impacts of Polynesian exploration.

The students **evaluate** the meaning of the last sentence, taking into account the information in the text, their experiences, and what they know about the world.

If you made a chart to record what students know about early Polynesian voyaging, review it and ask students to add more information.

ASK QUESTIONS to help the students link information across the text.

- How did the fact that they were skilled voyagers help them maintain traditions and customs?
- What are some examples of the “similar but different” cultures of Polynesia in New Zealand?
- Why do you think so many different island states developed in the Pacific? What evidence supports your thinking?
- Do you know of other cultures where people have travelled long distances to settle in other places? What traditions and customs are evidence of that?

MODEL how you synthesise information.

- I've read the articles and I've learnt how Polynesians travelled and set up communities in many new places. When I read page 15, I realised that this was similar to what happened for my ancestors. They travelled from Scotland to many different countries at a time when life was very hard. Scottish people all over the world have some traditions in common, such as playing bagpipes, wearing kilts, and eating haggis. I can now synthesise information from the book with my own family's experiences to understand more about how and why culture and heritage is passed on.

ASK QUESTIONS to support the students as they synthesise information.

- Where did your ancestors come from to be in New Zealand? From Hawaiki? Or from the other side of the world?
- What traditions and customs have they kept?
- Now that you've learnt about Polynesian travelling, what does the last sentence of the book mean for you?

GIVE FEEDBACK

- I saw you going back to the text several times to check details. You've used links across the whole book to understand ...
- Telling us about your family's experiences of moving between New Zealand and Tokelau gave us all a better understanding of how important these links are for you.

MONITORING THE IMPACT OF TEACHING

- Ask the students to talk in pairs to clarify the difference between “ancestors” and “descendants”. If necessary, use a diagram to show the difference between past, present, and future generations. You could make a comparison with the concepts of yesterday, today, and tomorrow.
- Many students will have prior knowledge they can relate to parts of the articles. If some need support to do this, help them to identify comparable experiences.
- Support students as they synthesise information by asking them to think aloud about an idea as you guide them to bring together information from the text and their prior knowledge. Ask other students to reflect on what they have heard and respond to each other's ideas.

METACOGNITION

- Show me where you had an “ah-ha” moment – where you could link two ideas with something you already knew. Explain how this happened for you.
- Show me a place where you were puzzled. Tell me about what puzzled you and how you tried to work it out.
- Which strategies were most useful as you read this book? Show me a place where you used a particular strategy.

Suggestions for writing instruction

- Continue to support students as they develop a plan for their writing, showing them strategies they could use such as mind maps, flowcharts, and graphic organisers. Students will probably need support to move from the plan to the first draft, and then to revise their writing.
- Scaffold students to build on their writing strengths, giving stronger support where needed and reducing it as they take control of strategies.
- Some students will benefit from using a writing frame. Writing frames can provide different levels of scaffolding, from a framework for planning to providing topics and sentences starters. See ESOL Online, Writing frames or text frames.

Students could:

- Identify one aspect of Polynesian voyages and research, plan, and write about it. This could be a factual exploration of a topic (for example, navigating by the stars, comparing old and new forms of canoe construction) or a fictional response (for example, imagining leaving home to travel by canoe to an unknown destination, a tale of adventure on the high seas in a canoe full of people and supplies).
- Make comparisons with their whānau or family's journey from their home to a new home in New Zealand, describing the ways they remember the past and maintain their traditions.
- Use pages 12–13 as a model for describing another form of construction, for example, of a traditional whare or house.
- Explore the implications of the last sentence (“wherever you go, it is important to know where you have come from”) to write a poetic or factual response, based on their own experiences.



Writing standard: by the end of year 8



The Literacy Learning Progressions



Assessment Resource Banks