Life Jackets

by Katy Jordan

Overview

This report outlines the history of life jacket development and explains how life jackets help keep people safe. There are two other pieces in this *Junior Journal* about life jackets: "Staying Afloat", a story about Kele and Vika (who also feature in *JJ* 49 and *JJ* 50) on a fishing trip with their grandad, and "In the Manawaū", a humorous poem.

Junior Journal 54 Level 2 This text is levelled at Gold 1



"Life Jackets" requires students to "confidently use a range of processing and comprehension strategies to make meaning from and think critically about" text (from *The Literacy Learning Progressions*, page 14).

There is a PDF of the text and an audio version as an MP3 file at <u>www.juniorjournal.tki.org.nz</u>

Related texts

Texts that include safety information: Bikes, Guide Dogs, Skate Champs (Ready to Read, Purple)

Texts that feature inventions and/or technology: *Bikes* and *Pencils and Pens* (Ready to Read, Purple); *Red Rattlers* and *The Impossible Bridge* (Ready to Read, Gold); "The inventor" (a poem) and "Making a Road" (*JJ 50*)

Text characteristics

Key text characteristics relating to the reading standard for after three years at school, as they relate to this text, are shown in the boxes with the solid outlines. Other boxes indicate additional characteristics.

A mix of explicit and implicit content that requires students to make connections between information in the text and their prior knowledge to visualise and make inferences Shifts in time indicated by changes in tense (the past tense for historical events and the present tense for current information), indicators of time (for example, "every year", "For thousands of years", "Long ago", "Then", "In 1854", "During the 1920s", "Today"), and adjectives (for example, "new", "modern") Some unfamiliar words and phrases, including precise descriptive language and subject-specific vocabulary, the meaning of which is supported by the context, the sentence structure, the illustrations, and/or explanations in parentheses

Ideas and information organised in paragraphs



A lot of people him to spend time on the water in bosting hardevery year, about twenty people drown in bosting accidents in New Zealand. Many of these people might have been swearing life jackets.

The history of life jackets

For thousands of years, people have used things to help them float In water. Long ago, they filed animal skins with a to help them cross deep rivers. People also saw that wood floated, so if they held on to a piece of wood, they would float, ico. Many solitors saved themselves by doing this when their ships sank. Then some solion started warring blocks of cark to help them keep sofe if they fell into the sea.

Cork life jackets In 1954, Contain Joh

In 1854, Captain John Ward Invented a life jacket using small pleas of cark sewn together. The cark life jacket was good at keeping people affort, but it was not very comfortable to wear. Also, cark is very hard, so people wearing cark life jackets sometimes broke bones when they fell or jumged into the sec.





Cork



A shift from thirdperson to secondperson narration near the end of the article

A variety of sentence structures, including complex sentences, so that students are required to notice and use pronouns (such as "these", "they", "them", "this") and other linking words and phrases (such as, "but", "if", "to", "too", "by", "also", "so", "when", "because", "or", "which", "such as", "that", "However", "Although") to clarify meaning

Visual language features, such as headings, subheadings, photographs, a bulleted list, and text boxes and captions (with associated changes in background colour and typeface), that are clearly explained and linked to the body text

رالی The Literacy Learning Progressions Reading standard: after three years at school

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The above spread:

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English (Reading)

Level 2 – Language features: Show some understanding of how language features are used for effect within and across texts.

Ideas: Show some understanding of ideas within, across, and beyond texts.

Technology

Level 2 – Technological products: Understand that there is a relationship between a material used and its performance properties in a technological product.

Health and physical education

Level 2 – Personal health and physical development: Safety management. Identify risk and use safe practices in a range of contexts.

Reading purposes and learning goals

Select from and adapt the suggestions below according to your students' strengths, needs, and experiences – their culture, language, and identity (*Reading and Writing Standards for Years 1–8*, Knowledge of the Learner, page 6).

Possible reading purpose

(What can the students expect to find out or think about as a result of reading this text?)

- To find information about the history of life jackets
- To think about how life jackets keep us safe

Possible learning goals

(What opportunities does this text provide for students to learn more about how to "read, respond to, and think critically" about texts?)

- The students **make connections** between the information in the text and between the text and the visual features to track information and **identify main points**.
- They **make connections** between the information in the article and their prior knowledge to **visualise** and **make inferences**.
- They ask questions about information in the text and attempt to find answers.
- They **monitor** their own reading, for example, they notice when something is unclear and attempt to solve the problem by rereading a sentence or looking for clues close by.

ဂွါကျ The New Zealand Curriculum	رائم The Literacy Learning Progressions
Text and language features	Possible supporting strategies (These suggestions may be used before, during, or after reading in response to students' needs.)
Vocabulary Possibly unfamiliar vocabulary, including descriptive language and subject-specific language: "boating accidents", "sailors", "themselves", "cork", "sewn", "very light bark", "oak tree", "kapok", "soft material", "tropical rainforests", "Orpheus", "passenger ship", "<i>Titanic</i>", "events", "British navy", "inflated", "inflatable", "synthetic foam", "packaging", "waterproof", "reliable", "comfortable", "properly", "buckles" 	 Prompt the students to remember the strategies they can use, often in combination, for example: when decoding: recognising words, word chunks, or syllables within words (for example, "sail-ors", "themselves", "ma-ter-i-al", "trop-i-cal", "rain-forests", "Ti-tan-ic", "in-flat-able", "water-proof", "re-li-able") drawing on their knowledge of common digraphs (for example, "<u>oak</u>", "f<u>oa</u>m"; "Orpheus") and their knowledge that some letter combinations can have more than one sound ("<u>sew</u>n", "<u>synthetic</u>") when working out word meanings: using the context of the sentence and/or the surrounding sentences looking for definitions in parentheses making connections to their prior knowledge reading on to look for further information. Readers are able to use strategies for working out unfamiliar words only when they know most of the vocabulary in the text. For English language learners who need support with vocabulary, introduce and practise selected items before reading. See ESOL Online: Vocabulary for suggestions.
 Text features Words and phrases that connect ideas within and across sentences 	Select a short section of text and explore how ideas are connected, including in this example, the use of the pronouns "they" and "them" to refer to "people": For thousands of years, people have used things to help them float in water. Long ago, they filled animal skins with air to help them cross deep rivers. People also saw that wood floated, so if they held on to a piece of wood, they would float, too.

Metacognition

HOW YOU CAN SUPPORT YOUR STUDENTS TO BE METACOGNITIVE

Here are some ways you can build students' awareness of the processes and strategies they are using as they make meaning and think critically.

- What helped you to understand why Orpheus Newman wanted to invent a better life jacket?
- What helped you work out the meaning of "synthetic"?

Sounds and Words

Introducing the text

- Use your knowledge of your students to ensure that your introduction is effective in activating their prior knowledge and providing appropriate support for a successful first reading. (If your students have read the story "Staying Afloat", they will have some prior knowledge of the topic.)
- Have the students look at the opening pages (10–11). Expect them to notice this is a non-fiction text. Ask them to share their prior experience or knowledge of life jackets and why they are important. If possible, have a life jacket for them to examine.
- Ask them to predict from the headings, subheadings, and other visual language features what they will find out about life jackets on these two pages. If necessary, clarify the meaning of "history".
 Expect the students to infer from the photographs that life jackets were very different in the past.
- Briefly review the structure of a report (an introduction, a series of main points, a conclusion). Ask the students to think of words that they might find in a report about life jackets.
- Have the students look through the rest of the article using the visual language features to predict the gist of the article: a section on different sorts of life jackets (who invented them, and why) followed by information about keeping safe in water. Draw attention to the use of bullet points on page 15 and, if necessary, explain that they are a way of presenting a list.
- Encourage the students to share any questions they have. You could provide them with sticky notes to mark any answers or further questions or aspects they want to discuss further.
- Together, set a reading purpose. Share the learning goal(s).

Reading and discussing the text

Suggestions for ways that you can support the students to achieve the learning goals are in the right-hand column of the table below. **Select from and adapt** the suggestions according to your students' needs. These suggestions may apply to the first or a subsequent reading of the text.

Encourage the students to read the text by themselves, intervening only if it's clear a student needs help. There will be many opportunities to provide support with word solving and deeper comprehension on subsequent readings.

Student behaviours

Examples of what to look for and support as the students work towards achieving their learning goal(s). Note that much of the processing that students do at this level is "inside their heads" and may not be obvious until after they have read the text and you are discussing it as a group.

Deliberate acts of teaching

Examples of how you can support students as they work towards achieving their learning goals. Often this will involve individual students rather than the whole group.

The first reading	
 The students make connections between the ideas in the introductory paragraph and their prior knowledge to confirm their ideas about the importance of life jackets. 	 Remind the students that the introduction to a report introduces the topic and explains why it's important.
• They use clues in the second paragraph (for example, "filled animal skins with air", "cross deep rivers", "held on to a piece of wood") to visualise how life would have been different in earlier times and why people needed to think of ways to keep afloat in the water.	 Prompt the students to look for information that helps them imagine (visualise) what life was like in earlier times.
• The students make connections between the text and the visual features, for example, by using the information in the text box on page 11 to build their understanding of cork. They repeat this process to clarify their ideas about kapok and synthetic foam in the following pages.	• Remind the students that the text boxes are there to provide further information.
 The students demonstrate word solving strategies, for example, using definitions and explanations in the text to clarify meaning. 	• Remind the students of word-solving strategies they can use.
 By the end of page 13, they have begun to notice the problem– solution pattern of the article and predict that the next section will be about how the kapok problem was solved. 	Encourage the students to look for connections between ideas.
• They use their sticky notes to mark aspects of particular interest or things they are not sure of.	 Remind them they can note things they want to come back to or investigate further.
 The students infer from the heading "Modern life jackets" on page 15 that the history section is finished and predict that the rest of the report will be about life jackets as they are now. 	 Remind the students that headings are there to help the reader keep track of main ideas.
 As they read on, they notice the repeated use of "you" and infer why the author might have done this. 	• Prompt the students to notice the significance of the change from the third person to the second person ("you"): <i>I wonder why the author has used "you" in the heading</i> (on page 15).
• As the students read the last two body text paragraphs on page 16, they notice the connection to the ideas in the introduction about the importance of life jackets. (Some students may also notice the connection to Kele's behaviour in "Staying Afloat".)	 As they complete their reading, encourage them to reflect on what they have found out.

Discussing the text after the first or subsequent readings

- The students discuss how they met the reading purpose. They share their opinions about aspects of particular interest, referring to any notes they have made during reading. They may have found answers to their questions or come up with new questions.
- They draw on their knowledge from the first reading to decide which of their questions might be answered by a closer reading of the text, and use the visual language features to find sections with relevant information.
- The students think, pair, share oral summaries of sections of the text, including information in the text boxes or photographs. (The opportunities to prepare and rehearse ideas makes this activity supportive for English language learners. Also see "After reading".)
- Remind the students of the reading purpose. Review the structure of the report (the introduction stating why life jackets are important; the main part describing the development of life jackets; the final sections that restate the importance of life jackets). Encourage the students to share things they have learned, as well as any questions.
- Support the students in deciding which questions might be answered in the text. For these questions, prompt the students to use the subheadings and other visual language features to locate relevant information. Record other questions for further investigation.
- Ask the students to work in pairs to orally summarise key points from a section of the text. Record their summaries on a chart. Encourage other students to add their own comments or questions.

Supporting metacognition

With support, the students reflect on their learning.

- The students describe information in the article and in the discussion after reading that was useful (or not) in answering their question.
- The students identify how a photograph helped them, for example, how the page 12 photo of kapok filling clarified what kapok is.

Remind the students of the reading purpose and learning goal(s).

- Have the students share with a partner a question they noted as they read and what they did to try to answer it.
- How did the photographs help you understand this article?

After reading: Practice and reinforcement

- Provide further opportunities for students to reread this text, as well as other texts (see "Related texts" and the suggestions below about further research). Also see the "After reading" suggestions for "Staying Afloat". The students could reread the story as they listen to the audio version. Audio versions also provide English language learners with good models of pronunciation, intonation, and expression.
- To draw attention to how ideas are connected within sentences, have the students match the two halves of cause and effect sentences. Give them the table below with the left-hand column filled in (and the right-hand column blank) and have them find the missing half of the sentence in the text. You could increase the level of support by providing the missing sentence halves (in random order) and/or by having them work in pairs. When discussing the completed activity, expect the students to notice the variety of connecting words and that the reason (the "Why") may be in the first half of a sentence. This activity will be particularly useful for English language learners.

What happened?	Why did it happen?
Long ago, they filled animal skins with air	to help them cross deep rivers.
Then some sailors started wearing blocks of cork	to help them keep safe if they fell into the sea.
people tried making life jackets filled with kapok.	To solve the problems with cork life jackets,
so it floats easily.	The foam is full of small bubbles of air,
They are much more comfortable than the older life jackets	because they are made from very light materials.
so they are easy to see in the water.	Most modern life jackets are yellow or bright orange
Life jackets for children have extra buckles and straps	to make sure that they stay on.

- Provide opportunities for students to research questions arising from the reading (for example, the students could research other uses of cork, kapok, or synthetic foam or find out more about life jackets for animals. They could find information about the inventors mentioned in the article or other inventors (see http://natlib.govt.nz/schools/topics/57ed83d4125757166700282e/inventors-and-inventions).
- Have the students work with a partner to choose six new topic words from the text and write their own definition or explanation of each word using information from the article, ideas from group discussions, and the dictionary.
- Use some of the topic words as an opportunity to explore word structure, in particular, identifying the root word and the use of prefixes and suffixes to change word meanings. The students could create a table like the one below.

Examples in the article	The root word	Other forms of the word
float, afloat, floated, floats	float	floating, flotation
inflated, inflatable	inflate	inflates, inflating, deflate
invent, invented	invent	invents, inventing, inventor, invention
comfortable	comfort	comforts, comforted, comforting, uncomfortable
reliable	rely	relies, relied, relying, unreliable
safe, safer	safe	safest, safety, unsafe



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