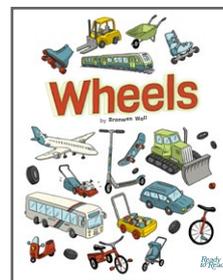


Wheels

by Bronwen Wall



Shared reading

Shared reading provides students with opportunities to behave like readers and to engage in rich conversations about texts that they are initially not able to read for themselves. The focus is on engagement, enjoyment, and comprehension.

Shared reading involves multiple readings of a text, led by the teacher, with increasing interaction and participation by students. After many shared reading sessions, students become able to read, with increasing independence, the small books that accompany the big books.

Overview

This non-fiction text makes connections to students' everyday experiences of using wheels. It also explores the history of wheels, how wheels work, and some different sorts of wheels, providing many "stepping-off points" for further reading and investigation. *Wheels* also helps build students' awareness of the features of non-fiction texts, including a table and a timeline.

There is an audio version of the text as an MP3 file at www.readytoread.tki.org.nz

Cross-curriculum links

Science: Physical World (levels 1 and 2)

Physical inquiry and physics concepts – Explore everyday examples of physical phenomena.

Participating and contributing – Explore and act on issues and questions that link their science learning to their daily living.

Technology:

Technological knowledge (levels 1 and 2): Technological products

Nature of Technology (levels 1 and 2): Characteristics of technological outcomes

Related texts

- Non-fiction texts about wheels: *Bikes* (Purple 1); *Red Rattlers* (Gold 2); "Hotel on Wheels" (JJ 13)
- Texts that feature people using wheels: *The Race* (Red 1); *Hannah's Bike*, *Late for the Race* (Red 3); *A Friend for Mateo* (Yellow 3); *Bikes*, *Skate Champs*, *Tom's Tryathlon* (Purple 1); *Red Rattlers*, *The Greatest Race on Earth* (Gold 2); "Crackles the Clown" (JJ 20); "Wild Wheels" (JJ 26); "The Story of our House" (JJ 28); "Motocross" (JJ 30)
- Texts about changes in technology over time: *The Way It Was* (Green 1); *Pencils and Pens* (Purple 1); *Red Rattlers* (Gold 2); "The Mail Trail" (a poem, JJ 35); "Life Jackets" (JJ 54); "I Am Alice" (Connected 2016 Level 2 *Show and Tell*)

Text characteristics

Unlike guided texts, shared reading texts are not levelled. Many of the text characteristics of *Wheels* are similar to but more complex than those for guided reading.

Many high-frequency words as a support for independent reading

A mix of explicit and implicit content that provides opportunities for students to make connections, ask questions, and identify main ideas

Visual language features including headings, a contents page, illustrations, photographs, labels, a cartoon strip, a table, a timeline, text boxes, and bold text for topic words

The format of the text as a report with an introduction, a series of main points organised in paragraphs under headings, and a conclusion

A variety of sentence structures, including some cause-and-effect sentences and sentences with indicators of time ("long ago", "about five thousand years ago", "two hundred years ago", "in the last 150 years", "Now", "in 1993")

The history of wheels

Wheels were invented long ago to solve the problem of moving heavy things. People saw that round things could be used as rollers to move other things. People worked out how to make wheels.

This is a wooden wheel from about five thousand years ago.

They used wheels to make **vehicles**, like carts and wagons. (A vehicle is something that is used to carry people or things.)

This is a hay cart from about two hundred years ago.

Mostly familiar words, but some new topic words (for example, "vehicles", "wagons", "penny-farthing", "stagecoach", "spokes", "axle", "unicycle") and precise descriptive language (for example, "move easily", "go further", "used as rollers", "same size", "solid"), including noun phrases (for example, "a wooden wheel", "thick tyres", "rubber tyres", "special ridges"), the meaning of which is supported by the context, the sentence structure, visual language features, and/or by explanations

Reading purposes and learning goals

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

Select from and adapt the suggestions in this teacher support material 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).

Each reading purpose is accompanied by learning goals. The learning goals are the sorts of behaviours that you want your students to demonstrate after multiple readings of this text and when reading other texts.

The focus of the first reading of a shared text is on making meaning. The teacher leads the reading, with students invited to join in as they feel confident so that they can focus on responding to and thinking about the content. There will be many opportunities to build comprehension and explore word and text features on subsequent readings.

A suggested purpose for the initial reading

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

To find out about wheels

To think about how we use wheels

Possible learning goals

During the first reading, the students can:

- **make connections** to their prior knowledge
- **ask questions** about aspects they are unsure of
- identify (**summarise**) some facts about wheels
- notice some ways the text and visual language features work together to help the reader.

Introducing the text

- This book makes strong connections to students’ experiences, so the introduction can be brief.

To provide vocabulary support for English language learners, use the illustrations and photographs in the book (or real objects) to introduce and practise some subject-specific vocabulary. When introducing nouns, remember to include the appropriate article (a axle, a bike, the wheel) as English language learners often need support with the use of articles. If possible, also provide the names of the objects in their first language.

- Read the title and discuss the illustrations on the cover. *What do you think we might find out in this book?*
- Turn to the contents page and discuss its purpose. Read the first few headings to confirm that this is a non-fiction text about wheels.
- Share the purpose for reading.

Reading and discussing the text

- Many of the ideas in this book are likely to be of great interest to students. Allow plenty of time for discussion and to explore the visual language features. You might want to spread the first reading over more than one session.
- Use a pointer to help the students track the print as you read. Read the first heading on the contents page and the associated page number, then turn to page 2. Prompt the students to notice that this has the same heading.
- Page 2 – While you read, ask the students to think about how wheels are helping the children in the illustration. Have the students share their ideas when you reach the end of the page.
- Page 3 – Read the labels on the small illustrations and allow time for students to find the relevant examples within the main illustration. After reading the body text on page 3, ask: *What are these pages telling us about how wheels help us?* Prompt the students to make connections to their own lives: *What if we didn’t have cars or buses? Think about how we would get to places?*
- Pages 4 and 5 – Read the heading and use the illustration to clarify the meaning of “history”. Discuss what is happening in the cartoon strip. *What problem are the people trying to solve?* Read the first paragraph to confirm the problem and how they solved it. *How could the log help to move the heavy rock?* (Either now or after the reading, you could use a few pencils or cardboard rolls as “rollers” to demonstrate how easily they could move a heavy classroom object such as a dictionary. This will be particularly helpful for English language learners as it introduces the different forms of “roll”, such as “rolling” and “rollers”.) Read the rest of the page to find out what happened next in the history of wheels. Clarify that a great deal of time would have passed from the idea of using logs as roller to having carts with wooden wheels.
- Pages 6 and 7 – Read the heading and the text that runs across the top of pages 6 and 7. Tell the students that these pages show a timeline and that a timeline shows things that have happened and puts them in order from earliest to latest. Point out the years on

the timeline and the words “Long ago” and “Now”. Explain that a timeline is read from left to right (just like a book). Explore the timeline together, starting with the information about how the bike wheels have changed. (Expect it to take several readings for the students to build their understanding of the concept of the timeline.)

- Page 8 – Read the heading and the explanation in the body text. Discuss the close-up of the wheel and axle. (After the reading, the students could investigate these on a real scooter.)
- Page 9 – After reading the heading, ask the students to look at the photographs to see how the wheels are different. Then read the page to confirm or clarify their ideas.
- Pages 10 and 11 – Read the heading and the body text on page 10. Clarify that the word “table” has more than one meaning and that this table is showing a way of sorting information. (They may have also seen a table in the shared book *Will They Float?*) Encourage them to make connections to their prior knowledge as they discuss the vehicles shown on these pages and to think about why vehicles have different numbers of wheels. (You could explore the prefixes “uni-”, “bi-”, and “tri-” further on a subsequent reading.)
- Page 12 – Enjoy the students’ fascination with the idea that a hotel could be moved on wheels. Have them share their responses to the question on this page.
- Remind the students of the reading purpose and ask them to talk with a partner about one thing they have found out about wheels.
- The students could follow-up the first reading by:
 - drawing and writing about one thing they have learnt or about a recent experience using wheels
 - looking at a scooter to clarify the information on page 8
 - experimenting with using rollers to move small classroom items
 - cutting up and sorting photocopies of the illustrations on the inside back cover (or pictures from magazines) according to their number of wheels
 - finding out more about moving buildings (see Related texts, and/or go to <http://www.stuff.co.nz/dominion-post/news/wellington/9054381/Training-all-eyes-on-shifting-a-hotel>).

Suggested purposes for subsequent readings

You can return to this text many times to build students’ understandings and explore different purposes. Subsequent readings of the big book may be with a group of students who have similar learning needs rather than with the whole class. Note that several of the following suggestions overlap. **Select from and adapt** them according to your students’ responses and needs.

Suggested reading purpose

To find out more about wheels

To notice parts of this book that help us understand the information about wheels

To explore some of the ways the writer has used language to help us understand the information about wheels

Learning goals

Over a number of sessions, the students can:

- **ask questions** about aspects they would like to know more about
- **make connections** between the text and visual language features
- **identify main ideas** and **make connections** between ideas
- identify and discuss new words about wheels
- explore how the author describes and explains things.

Choose one of the suggestions below for each session.

- As you reread, encourage the students to ask questions about things they would like to know (for example, What sorts of things do vehicles carry? Why do tractors have big, bumpy tyres? What sorts of wheels do aeroplanes have?) The illustrations inside the back cover could be a useful prompt for discussion. Record their questions and create opportunities to search for answers, for example, by asking their family, using library books, or searching online. You could also set up a technology inquiry corner with wheels, rollers, and some of the vehicles featured in this text, or toy versions of them.
- Support the students to notice connections between the text and the visual language features that help them understand the information. For example:
 - on page 3, how the labels on the illustrations help them focus on some of the important ways that wheels help us
 - on pages 4 and 5, how the text boxes provide extra information
 - on pages 6 and 7, how the photographs, text boxes, dates, and coloured lines all help to show how “wheels have changed in the last 150 years”
 - on page 10, how the table makes it easy to see which vehicles have one, two, or three wheels by grouping and labelling them. The students could follow-up by pasting pictures onto a group or class table about vehicles with one, two, or three wheels. They could choose one vehicle (or one vehicle from each category) and write about its name, how many wheels it has, and what it’s used for.

- Revisit the timeline. Discuss the main points in the photographs and text boxes and encourage the students to speculate on some of the problems with wheels in the earlier days. The students could construct their own timelines based on wheels in their own lifetime (for example, as a baby, when they were three, and now). They could draw pictures or use photos. Alternatively, they could ask their parents and other older family members for photos of wheels in their lives and show them on a simple timeline, using labels like “When Nana was a girl”, rather than actual dates.
- Use the illustrations inside the back cover as a prompt for revisiting some of the main ideas in the book (such as how we use wheels, different sorts of wheels, and vehicles with different numbers of wheels). Allow time for students to explore and discuss the illustrations and make connections to the vehicles that have appeared elsewhere in the book. You could ask the students to choose one of the vehicles and say one or two things about it, for example, its name, how many wheels it has, or what it’s for. If you have a big group, the students could do this activity in pairs.
- Draw attention to the headings as a guide to the main ideas. After reading a page, support the students in identifying how the information on the page has explained the heading. For example, on page 9: *What does this page tell us about “Different sorts of wheels”?*
- Focus on the main idea on page 2: how wheels help us. As you reread the book, support the students in identifying information that connects to this main idea (for example, pages 2–3: helping us get to places; pages 4–5: helping us move and carry things; pages 6–7: having fun, providing transport; pages 9–12: doing special jobs). You could create a table like the one below to clarify the connections between the main idea (how wheels help us, row 1), supporting ideas (row 2), and examples from the book and from the students’ own experiences (row 3):

How wheels help us			
Wheels help people get to places	Wheels help move heavy things	Wheels help people have fun	Wheels help people do jobs
cars	trucks	bikes	tractors on farms
pushchairs	carts	scooters	taxis
buses	wheelbarrows	roller skates	bulldozers

The students are likely to notice several examples that belong in more than one place. They could choose one

heading to draw and write about or to investigate further. As an extension activity, you could support the students to investigate other ways that wheels help us, for example, to help larger machines work, such as clocks; or wheels that are machines themselves, such as Ferris wheels and water wheels.

- Focus on the words in bold print. Tell the students that the bold print shows they are important words and they are explained in the text. Discuss the examples on pages 5, 8, and 9 and the information that shows the meaning. On page 10, have them look closely how bold print is used to show just part of the words “unicycle”, “bicycle”, and “tricycle”. Explain that the prefixes “uni-”, “bi-”, and “tri-” mean one, two, and three, then relate them to other words they may know (or can be explained or shown visually), for example, “unicorn”, “uniform”; “biplane”, “bilingual”, “biweekly”, “biyearly”; “tripod”, “triangle”.
- As you reread the text, draw attention to how the combinations of words within noun phrases (for example, “heavy things”, “round things”, “a wooden wheel”, “thick tyres”, “rubber tyres”, “special ridges”) make it easier to understand exactly what the writer means.
- Explore some cause-and-effect sentences from the text. (There are four sentences that use the word “to” to join ideas, and one that uses “so”.) For example, in the sentence “Wheels were invented long ago to solve the problem of moving heavy things”, help the students identify the connection between the two ideas: “what happens” and “why it happens”. Repeat this with other examples on pages 4, 5, 7, and 11. Explore cause-and-effect sentences further by creating oral sentences together. You could provide sentence halves for the students to complete, using “to” or “so”, for example, “Jack climbed the beanstalk ...”; “Mrs Wilson got her umbrella ...”; “We made pizza ...”. You could also model cause-and-effect sentences in shared writing.
- Provide many opportunities for students to use the new vocabulary that they have met in the text. This is particularly important for English language learners to ensure that this vocabulary is learnt. A Concept Circle (see <http://esolonline.tki.org.nz/ESOL-Online/Teacher-needs/Pedagogy/ESOL-teaching-strategies/Vocabulary/Concept-circle>) is an effective way of promoting language use.