

Overview

“Making Paper” describes how a class turned waste paper into an interesting, new kind of paper. This example of a procedural text includes explanations and is well supported with photos. It 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).

The procedure described in the article is complex, so it would be best to read the article over two or more sessions. You should notice changes in reading behaviour as the students become more familiar with

the topic and the strategies that help them read and summarise the steps.

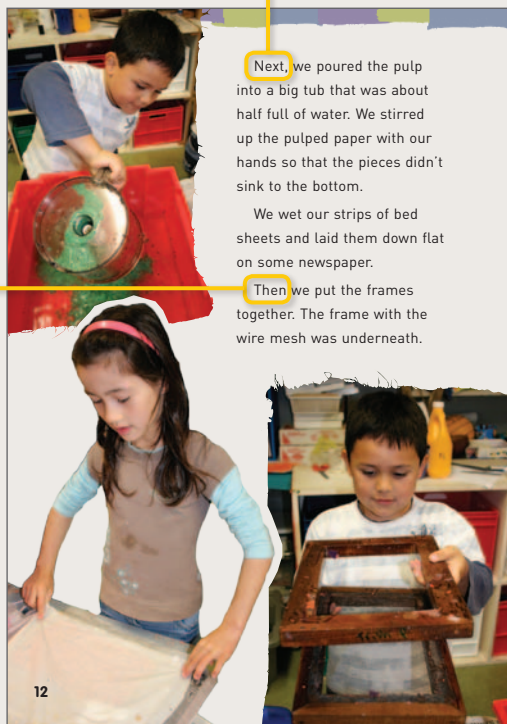
If you wish to replicate this procedure with your class, you can make paper with just one frame. The double frame keeps the sides of the paper even, but it is not essential. An easy way to make a simple frame is to staple some wire mesh onto a wooden photograph frame.

There is an audio version of the text on the *Readalong 2012: Ready to Read and Junior Journal 44 and 45 CD* as well as on an MP3 file at www.juniorjournal.tki.org.nz

Text characteristics

Key text characteristics relating to the reading standard for after three years at school are shown in the boxes with a solid outline. Other boxes indicate additional characteristics.

The features of the procedure, including a bulleted list of items (on page 9), words and phrases to indicate sequence, and photos that show stages in the process



The familiar context of recycling

Visual language features such as diagrams that are clearly explained and linked to the body text



Some unfamiliar words and phrases, the meaning of which is supported by the context or illustrations

English (Reading)

Level 2 – Ideas: Show some understanding of ideas within, across, and beyond texts.

English (Reading)

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

Science (Material World)

Levels 1 and 2 – Properties and changes of matter: Observe, describe, and compare physical and chemical properties of common materials and changes that occur when materials are mixed, heated, or cooled.

Suggested reading purpose

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

- To find out how the students in the article made recycled paper

Setting a learning goal

(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 opportunities below to set your specific learning goal or goals. In addition to using the information you have gathered about your students from a range of reading assessments, be guided by their particular strengths, needs, and experiences – their culture, language, and identity (*Reading and Writing Standards for Years 1–8*, Knowledge of the learner, page 6).

The characteristics of this text provide opportunities for students to:

- ask questions and look for answers in the text
- identify and summarise the main ideas
- use visual language features to support their understanding
- use multiple sources of information to clarify meanings of unfamiliar words and ideas.

**Text and language features****Vocabulary**

- Possible unfamiliar words and phrases, such as “recycling”, “food processor”, “pulp”, “sponge”, “mush”, “squishy”, “slimy”, “swished”, “mushy”, “pulped”, “wire mesh”, “tricky”, “Luckily”, “damp”, “process”

Text features

- The features of a procedure, including the purpose, a bulleted list of items needed, the use of words and phrases to indicate sequence (such as “First”, “The next day”, “Then”, “Finally”)
- Photos that show stages in the process
- Parentheses (in the bulleted list) that indicate additional information
- Language for signalling purpose (for example, “to make” [pulp], “to soak”, “to make” [it mushy], “so that”)
- The diagram, with a caption and labels showing the layers of paper and sheet

Specific knowledge

- Making paper or another, similar process such as papier mâché or making a collage
- Recycling
- Following a process in an explanation or procedural text

Possible supporting strategies

For students who will need support with understanding the vocabulary and structures in the text, provide scaffolding before reading the whole text. After reading page 8 together, you could:

- give the students a photocopy of the list on page 9 and a matching picture for each item. Tell them to match each picture with a bullet point and discuss what it’s for. Display an enlarged version of the list on page 9. Hold up a picture, say what the item is, and stick it beside the appropriate bullet. Tell the students to check their own lists.
- give pairs of students cards with some of the main verbs from each step in the process (for example, “poured”, “squeezed”, “stirred”, “wet”, “laid”). Ask them to discuss the verbs and what they might mean in this context. Give them cut-up photocopies of the pictures of each stage and tell them to match them with the verbs. Discuss their ideas.
- have the students listen to the audio and check their pictures and verbs and their sequence. Play the audio version of the text, pausing after each step. After listening to the audio (twice if necessary), have the pairs share and discuss their ideas. Tell them you are now all going to read the article and check.

Monitor the students’ **decoding** attempts by noticing their use of words from the text during discussion.

Prompt them to remember strategies they can use, for example:

- breaking words into syllables or familiar chunks (“re-cycl-ing”, “re-cycl-ed”; “pro-cess-or”).

Monitor the students’ use of **word-solving** strategies to work out the meaning of unfamiliar words and phrases. Prompt them to remember the strategies they can use, often in combination, for example:

- drawing on knowledge of phonics, onomatopoeia, and the context to work out what the pulp feels like (“mush”, “squishy and slimy”, “squeezed and swished”, “mushy”, “peeled”). Ask the students to demonstrate moving their hands as if they are in a tub of paper pulp. *How do the words help you imagine what the pulp feels like?*
- drawing on related experiences to understand a process, for example, turning the frame to release the paper (page 13): *Have you ever used a bucket to make a sandcastle? Mime turning the bucketfull of sand over to turn it out. Was that tricky? What could go wrong? That’s just like turning the frame over onto the damp sheet.*

Have a dictionary available to confirm or clarify word meanings.

If necessary, review the text features used in other procedures the students have read. Discuss why these features are used (to make it easy to follow).

**Metacognition**

Effective readers are metacognitive. They are aware of the processes and strategies they draw on and are able to explain how they use these to successfully make meaning and think critically. Examples of metacognitive behaviours, or strategies teachers can use to promote metacognition, are threaded through the notes and indicated by

HOW YOU CAN SUPPORT YOUR STUDENTS TO READ, RESPOND, AND THINK CRITICALLY

Ask questions: *How did you know that bit was wrong? Or: I noticed that you reread that bit when you got confused. How did rereading help you?*

Use prompts: *How did you know that bit was right? Think about the strategy you used. How did it help you?*

Introducing the text

- Before the students see the article, read the first sentence aloud and ask them to suggest answers to the question. Discuss what happens to paper that is put in the recycling bin and discuss the idea of recycling paper into “new” paper.
- Read the title and then have the students share anything they know about making paper.
- Depending on the needs of your students, you could select activities from the Text and language features section before reading the text.
- Share the reading purpose and learning goal(s) with the students.

Reading and discussing the text


Below, in bold, are the sorts of behaviours (derived from the learning opportunities for this text) that you want your students to demonstrate as they read and discuss the text on the first or subsequent readings. Instructional strategies you can use to support the students to demonstrate those behaviours are in the right-hand column. **Select from and adapt** the suggestions according to your students’ needs and experiences.

- The students ask questions about the process and look for answers in the text.**
- They use text and visual language features to support their understanding.**
- They identify and summarise the main ideas involved in each step.**
- They use multiple sources of information to clarify meanings of unfamiliar words and ideas.**

What to look for, prompt, and support as the students work towards achieving their learning goal

Page 8

The students ask questions and search for answers in the text about why the class want to make paper and how they will go about it.

 The students share their questions with a partner and explain how they searched for an answer.

Page 9

Students share any questions they have for this page and share their answers.

The students recognise that a list of equipment is a text feature of a procedure and use their experiences of similar texts to know that all the items will be needed for making paper.

Students identify the sequence word that signals what the students need to do at the beginning of the process. They may notice that the students in the article also rip up paper, but this is not directly covered in the text.

Page 10

The students identify the key information. They consider information to decide if it is important to the main idea, and they can explain their decisions. They use the main idea to summarise each step, and they share their ideas with the group.

Page 11

The students use the words “next day” to confirm the paper was left to soak for a long time. They infer that the paper has changed because it was left for so long. They share their summary.

How you can support students to read, respond, and think critically

Prompt the students to use the strategy of asking questions as they read. Model asking your own question: *I'm wondering what kind of equipment they'll need to make paper?*

Remember to keep thinking of your questions as you read and to keep looking for the answers. It's a great way to focus your reading.

Tell the students to turn to a partner and share one question they asked themselves. *Did you find an answer in the text? Where might you find it?* If necessary, have the students share some of the questions they had and any answers they found.

Model the way you had your own question answered: *The list and the photo show me the things they need. But I'm wondering why they need old bed sheets.*

Have some of your questions been answered? Remember to continue asking and searching for answers as you read.

Prompt the students to identify the text features on this page. *What information does the list give you?*

If necessary, point out the word that signals the start of the process (“First”). *As you read, look for a word or phrase that tells you they're up to the next step.*

Discuss finding the key information. *As we read each paragraph, we are looking for the most important idea or ideas about what happens in each step of the process. This will help us to summarise that step.*

Model aloud after reading the first two sentences on page 10. *I know that the pieces of paper need to be made into pulp. This is probably the key piece of information. I'm wondering how that happens. I'll read the rest of this paragraph to see if I can find out more information about the first step of making pulp. I will use that in my summary.*

Have the students read the last two sentences and then share what they found out.

Model summarising this step and record it on a chart: *They have to soak the paper so it can be made into pulp.*

Continue to add to the chart as you go through the text.

After reading the first paragraph, have the students find the key information. If necessary, have them think about how long the paper was left to soak and how the paper has changed.

If necessary, model a summary of this step, for example: *They leave the paper to soak overnight.* Add the summary to the chart.

Page 11 continued

The students identify that the food processor is important because it mixes up the paper and helps the dye from the green scraps of paper to make the paper green. They share their summary with the group.

☑ The students discuss the strategies they use to make summaries.

After reading the second paragraph, have the students consider the role of the food processor and summarise this step.

I'm thinking that the food processor is important. What key information can you find in this paragraph about this step? How can we add this information to our summary chart?

As the students continue to read through the steps, gradually reduce the level of support. Monitor the strategies students are using to identify and summarise the main ideas. For example, are they using sequence words and verbs to help them locate key information in the process? Are they asking themselves questions that help them think about each step? Are they checking the photos to ensure they have included necessary steps?

Pages 12–13

The students summarise the next steps in the process. They use the words "Next", and "Then". They use the photos to support their thinking.

Support the students to continue to look for sequence words and use the photos and the words to confirm their understanding of what is happening at each stage in the process. Have them share their summaries and then add to the chart.

They have wet a strip of bed sheet, and they are laying it flat. I wonder what it will be used for?

You may need to spend some time discussing the photo at the bottom of page 12 that shows the two frames.

Why are they pleased to see a lot of pulp trapped on the wire mesh? Why is turning the mesh frame over tricky? Is this an important idea?

Pages 14–15

The students continue to find the key information and then summarise each step.

The students look at the diagram and read its caption and labels. They explain to a partner their understanding of the layers of paper and bed sheet.

Why do you think it is important to sponge as much of the water off the pulp as possible? If necessary, prompt the students to think about how soggy paper is when it is full of water and how easily it falls apart.

Now we know what the strip of bed sheet is for. You may need to support the idea of a strip being folded over each new piece of paper. Have the students look at the diagram and then discuss with a partner their understanding of what it shows.

Pages 16–17

The students continue to share their summaries about the process, including squeezing the water out, hanging the sheets up to dry, and peeling the dried paper off the sheets the next day.

They make connections back to page 11 to explain that the students in the article use pieces of paper other than green when making more paper of different colours.

Have the students continue to summarise the key information and add it to their summary chart.

Prompt the students to think about why the first lot of paper that was made was green and how the subsequent paper was a range of other colours.

Read through the summary chart together.

☑ With support, the students reflect on their learning. They revisit the reading purpose and learning goal or goals, and they explain how they summarised each step, for example, by finding the key information and identifying sequence words.

☑ The students identify some challenges in the text and how they worked (or tried to work) them out.

Revisit the reading purpose and learning goal or goals.

☑ Ask questions: *What helped you summarise each step?*

☑ *What strategies did you use to help you solve any difficulties you had when reading this text?* If necessary, model or explain some strategies students could use.

After reading

- The students can reread the article as they listen to the audio version on the *Readalong 2012: Ready to Read and Junior Journal 44 and 45* CD or MP3 file. Audio versions also provide English language learners with good models of pronunciation, intonation, and expression.
- The students can write up the steps in a numbered list. They can do this as a shared writing exercise or in groups or individually. Use peers to review the steps to make sure nothing important has been left out. Use the illustrations from the pre-reading tasks suggested in the Text and language features section and write one to two sentences for each.
- Prompt the students to notice the language used to signal sequencing in the text. You could give them sentences from the text with the sequencing language left out and ask them to select from a word bank to fill in the gaps. Begin a chart of sequencing language and support them to use it in their writing.
- Make paper with the students, following the process from the article and/or the students' summaries.
- Provide opportunities for the students to practise and consolidate their skills of identifying and summarising the main ideas across other procedural texts. See the Related texts section below for examples of texts you could use in a guided reading session.
- Provide opportunities for the students to apply their newly acquired skills and knowledge beyond this text by having them discuss other recycling processes and carry out research to find out how things are recycled, for example, plastics, glass, or fabrics. They can practise finding the key information to create a summary sentence explaining what happens at each stage.

Related texts

Texts with procedures: "Make a Mini Worm Farm" (JJ 39), "Our Recycled Worm Farm" (JJ 40), "A New Home for Mokokoko" (JJ 43).