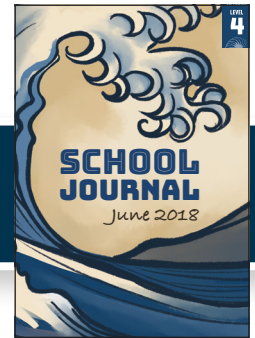


Pandemic: The Deadly Flu of 1918

by Renata Hopkins

School Journal
Level 4, June 2018
Year 8



Overview

This TSM contains information and suggestions for teachers to pick and choose from, depending on the needs of their students and their purpose for using the text. The material provides many opportunities for revisiting the text.

Most students are aware of New Zealand's participation in the First World War, but few will know of the flu pandemic that swept across the world in its aftermath. In New Zealand, the epidemic took over nine thousand lives in under two months – an appalling number, especially if compared with the eighteen thousand soldiers whose lives were lost to the war. This article conveys the horror of the event while imparting factual information about how the virus spread and how the government and communities tried to deal with it.

This article:

- provides facts and information about the 1918 flu pandemic
- incorporates primary sources that include photographs, a public health notice, and quotations
- uses a diagram to illustrate a process
- has non-continuous text with subheadings
- has footnotes with definitions.

A PDF of the text is available at www.schooljournal.tki.org.nz

Texts related by theme

“Kāhupani” SJ L4 June 2018 | “The Broad Street Killer” SJ L4 2011 | “The Children’s War” SJ L4 June 2014 | “Grey Angels” SJ L4 2014 | “Tūto‘atasi: The Struggle for Sāmoa’s Independence” SJ L4 May 2013

Text characteristics from the year 8 reading standard

We have retained the links to the National Standards while a new assessment and reporting system is being developed.

For more information on assessing and reporting in the post-National Standards era, see: <http://assessment.tki.org.nz/Assessment-and-reporting-guide>

Usually these changes are small and happen gradually over time. The type A virus, however, is able to change suddenly and dramatically to form a new sub-type – a process known as antigenic shift. This kind of big change means a host has less chance of beating the virus. Dangerous new strains of type A viruses sometimes emerge when bird, pig, and human influenza sub-types combine. Some scientists believe this was the cause of the 1918 influenza pandemic.

ANTIGENIC SHIFT

Virus sub-type 1

non-continuous text structures and mixed text types

It became clear very quickly that the 1918 strain of the flu was not the common illness people were used to. Whereas most flu viruses hit young and older people hard, this one was claiming mostly twenty- to forty-year-olds. And some were dying within twenty-four hours, when the flu usually took a week or longer to cause death. The virus was also causing unusual – and severe – symptoms. People suffered terrible nosebleeds; others haemorrhaged (bled excessively) from their organs. In many cases, the flu quickly developed into pneumonia, a complication that caused the victim's lungs to fill with fluid, making breathing difficult.

Pneumonia also caused cyanosis, where the skin changes colour because of a lack of oxygen in the blood. Audrey Drummond, who was a child at the time, remembered helping to nurse residents in the Wellington guesthouse where she lived: “Some of our patients turned ... a smoky sort of black. Some of them stayed that way for up to three weeks ...” To Audrey, the virus seemed more like the plague than the flu.

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

epidemic was caused by a type A virus. The type A virus is different from the others because it can infect species other than humans, including seals, whales, horses, pigs, and birds.

When a person is infected with an influenza virus, their immune system responds by creating **antibodies** so it can fight back. If that person catches the same (or a similar) flu at a later time, their immune system will recognise the virus and be better able to fight it.

Antibodies are proteins that recognise and bind to antigens, which are substances that trigger an immune response. When a person is infected with an influenza virus, their immune system responds by creating antibodies so it can fight back. If that person catches the same (or a similar) flu at a later time, their immune system will recognise the virus and be better able to fight it.

academic and content-specific vocabulary

People inside a spray chamber in Christchurch.

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




Reading standard: by the end of year 8

VOCABULARY

- Possibly unfamiliar words and phrases, including, “influenza virus”, “unknown strain”, “global pandemic”, “relatively isolated New Zealand”, “death toll”, “unsanitary”, “immune systems”, “compromised”, “strain of flu”, “complications”, “quarantined”, “exposed”, “outbreak”, “urupā”, “viral mutations”, “micro-organism”, “infected with”, “antibodies”, “antigenic shift”, “strains”, “foreign substances”, “severe”, “haemorrhaged”, “pneumonia”, “cyanosis”, “plague”, “serving overseas”, “makeshift”, “soup kitchens”, “clergyman”, “mourners”, “zinc sulphate gas”, “spray chambers”, “medical benefits”, “close contact”, “Aftermath”
- The language of death and war, with the virus personified as the enemy, including “allowed the killer virus to thrive”, “attacked their lungs”, “less chance of beating the virus”, “defend itself against foreign substances”, “Whereas most flu viruses hit young and older people hard, this one was claiming”, “coffins for the dead”, “burial services”, “a nation already devastated by war”
- Names of people and places, including “Te Kōura Marae, King Country”, “North America”, “Europe”, “South Africa”, “Japan”, “China”, “Peru”, “Greece”, “Italy”, “Featherston”, “Christchurch”, “Auckland”, “RMS Niagara”, “Prime Minister, William Massey”, “Sir Joseph Ward”, “Whina Cooper”, “Panguru”, “Hokianga”, “Audrey Drummond”, “Wellington”, “Lilla Leach”, “Cathedral Square”
- The abbreviation “flu”
- Statistical and other mathematical information incorporated in the running text, including “50 million people”, “Māori suffered a particularly high death toll: five to seven times that of Pākehā”, “a third of the country’s doctors and almost a quarter of its nurses”, “our death toll was at least nine thousand – half as many as the estimated eighteen thousand New Zealand soldiers killed during the entire war”

Possible supporting strategies

- Draw the students’ attention to the fact that some words in this text are bolded and have definitions as footnotes.
- Preview the text to identify other words and phrases that may be unfamiliar. Select a small number of topic-specific words, such as “influenza”, “virus”, “immune systems”, “strain of flu”, “mutations”, “micro-organism”, “infected with”, “antibodies”, “outbreak”, to focus on. Feed in these words during pre-reading discussions. Provide a definition for each word, ensuring that your definitions apply in the context of the article. (Note that the article includes definitions for some of them.) Ask the students to record the words and definitions in a notebook. English language learners could also write the definitions in their first language if they think it helps. Give pairs of students cloze sentences and have them fill in the gaps with the correct words from their list. Reinforce the meanings during reading. They could explore further nuances in a range of contexts after reading.
- Prompt the students to share other words related to the influenza virus. Create mind maps to show the links between words.


 The students could create their mind maps using an online mind mapping tool such as [MindMup](#).
- Build up word knowledge by developing word families for some of the topic words, for example: immune, immunity, immunise, immunisation.
- Remind the students of the difference between a proper noun and a common noun. *A proper noun is a particular place, person, event, date, or thing. Writers signal this by using a capital letter to start the word. So when we talk about wars in general, we don’t use a capital letter, but when we talk about the First World War, we use capitals.* Invite the students to find other examples of proper nouns from the text.
- Use [Google Maps](#) to help the students locate the places mentioned and get a sense of how far and how rapidly the pandemic spread around the world and within New Zealand.
- The [English Language Learning Progressions: Introduction](#), pages 39–46, has useful information about learning vocabulary.
- See also [ESOL Online, Vocabulary](#), for examples of other strategies to support students with vocabulary.

SPECIFIC KNOWLEDGE REQUIRED

- Some background knowledge about the history of the First World War
- Some background knowledge about viral diseases, such as the flu, and about the concept of an pandemic
- Awareness of vaccines and how they work
- Familiarity with concepts about the nature of science, including the lack of certainty in areas where there is not enough evidence to support a conclusion

Possible supporting strategies

- Prompt students to discuss what they know about the First World War and its impact in New Zealand. Make connections to their reading (for example, of other *School Journal* texts about the war), their experiences (for example, attendance at Anzac Day services or visits to exhibits), and their family stories.
- Read the title and have the students think, pair, and share their knowledge and experiences of having had the flu. Prompt them to imagine what a “deadly” flu might be like. Some students may be aware of recent examples of epidemics, such as swine flu or bird flu. *What might happen if a deadly flu came to New Zealand? How would we react?*
- Read the introductory paragraph together. If necessary, clarify that “the flu” refers to influenza, which is a viral disease.
- Check that the students understand the difference between a bacteria and a virus and how a vaccine works.

 The following websites give basic information about viruses and bacteria:

 - [The difference between bacteria and virus](#)
 - [Immunity and vaccines explained](#)
 - [What are vaccines and how do they work?](#)
 - [Flu attack: How a virus invades your body](#)

TEXT FEATURES AND STRUCTURE

- A non-fiction article in the form of a recount with explanations
- Some long complex sentences
- The use of qualifiers to indicate the degree of possibility, probability, necessity, and so on (for example, “most people”, “large numbers”, “far deadlier”, “many people”, “some evidence”, “some people”, “most flu viruses”, “largely over”, “in just a few months”, “most agree”)
- Use of the passive voice to:
 - indicate uncertainty, for example, “It’s thought”
 - generalise, for example, “Viruses weren’t understood to cause disease at the time, so the cause of the flu was unknown”
 - focus on what happened rather than who did it, for example, “Aside from the spray chambers, most public places in New Zealand were closed. However, not all gatherings could be stopped.”
- Authentic photographs and other primary source material
- Quotes from people who were children at the time
- The use of the ellipsis and the dash to create tension and emphasis or to include new information
- The double negative: “It wasn’t uncommon”
- The acknowledgment of a key source (page 29)

Possible supporting strategies

- Prompt the students to recall what they are likely to find in a non-fiction article, for example, factual information and photographs of people and events.
- Skim the text with the students, focusing on the headings and visual images. Support them to predict what each part of the text is about. It may help to turn the headings into questions.
- Explain that the article includes some compound and complex sentences. Use the very first sentence to remind the students of the features of a compound sentence. *A compound sentence has two independent clauses joined by a co-ordinating conjunction, like “so”, “but”, or “and”. A complex sentence has at least one independent clause – a groups of words that can stand alone as a sentence. It also has at least one dependent clause. Dependent clauses need to be connected to the independent clause with a subordinating conjunction, such as “after”, “even”, or “since”. How many independent clauses are there in this sentence? How are they linked up to form a sentence?*
- Identify the quantifiers and talk about what effect they have on the reader and the author’s message. *Do they help you to understand the author’s point of view? How does the text change if you replace a quantifier with a lesser or stronger one, for example, “all people”, “many people”, “most people”, “some people”, “a few people”, “no people”. Students could place the quantifiers on a continuum.*



Sounds and Words

Possible curriculum contexts

ENGLISH (Reading)

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

ENGLISH (Writing)

Level 4 – Language features: Use a range of language features appropriately, showing an increasing understanding of their effects.

SCIENCE

Level 4 – Nature of Science: Understanding about science: Appreciate that science is a way of explaining the world and that science knowledge changes over time; Communicating in science: Engage with a range of science texts and begin to question the purposes for which these texts are constructed.

SOCIAL SCIENCES

Level 4 – Understand how people respond collectively and individually to community challenges.

Possible first reading purpose

- To learn about the 1918 flu pandemic.

Possible subsequent reading purposes

- To understand how the flu pandemic was spread and how it affected people in New Zealand
- To understand how New Zealand responded to a major challenge
- To gain an understanding of how scientific knowledge changes over time.

Possible writing purposes

- To explain the risks of another pandemic and how we might prepare for it
- To write about the pandemic from the perspective of somebody who was a child at the time and who wants to tell their descendants about it
- To write an article about a historical event.



The New Zealand Curriculum

First reading

- Share the purpose for reading with the students.
- Read the title and introduction with the students and invite them to respond. Support them to make connections to their prior knowledge of the First World War and influenza.
- Prompt the students to share their initial questions about the influenza pandemic.
- Skim and scan the article together, prompting the students to use the headings and visual images to form more questions.
- Give the students a chart to record their questions. As the students read, prompt them to record the answers to their questions and to add any more that arise.
- If appropriate, have the students read the rest of the text by themselves with the purpose in mind. If students need more support, they could work through the text section by section and complete the chart in pairs. Use this as an opportunity to listen in to their discussion and identify where students may need additional support.
- Take a moment for the students to assimilate the ideas that worldwide 50 million people died from the pandemic immediately after a devastating world war, and that “No event had ever killed so many of us in such a short time.” *How do you think that impacted on people at the time? What do you think would be the lasting effect on families and communities?* (See the New Zealand History site if you need more information.)
- Note that while many students will not know about the 1918 pandemic, some students of Samoan descent may have grown up with sad and even anger-inducing stories about the fact that one-fifth of the population of Sāmoa died of influenza after the New Zealand authorities failed to quarantine a ship that had arrived from Auckland with infected passengers on board. (See “Tūto’atasi: The Struggle for Sāmoa’s Independence” SJ L4 May 2013.)

If the students require more scaffolding

- Clarify that the influenza pandemic took place immediately after the First World War. It affected people all around the world. It was not an ordinary epidemic. In New Zealand, it took just a few months to kill half the number who died during the war.
- Check that the students understand that “flu” is short for “influenza” and that there are many different “strains” of influenza. Unpack other key terms, using the approach suggested on page 2.
- Review the key vocabulary about influenza before the students read the text on page 25. Remind them how to approach reading a diagram. Note that this diagram doesn’t have a title, so it is especially important to read the nearby text to understand what it’s about. Discuss the purpose of the arrows and have them look closely at the images to see how virus 1 and virus 2 have mutated to form virus 3.
- Model how to ask pondering questions about the text and how to find information or ideas related to those questions. Demonstrate how sometimes we are told the answers directly, sometimes we need to infer answers from clues, and sometimes we can make connections to work out the answer ourselves. *I wonder what it was like for children at the time. They had already been through a war that had lasted four years and taken the lives of people they loved. How did they respond? What can we learn from the text? What information do we get directly from people who were children at the time? What do we learn from looking at the images? The writer quotes Audrey as saying that “the virus seemed more like the plague than the flu”. What do we know about the plague? Why would Audrey make that comparison?*
- Some students may need support to unpack the statistical information. Try graphing it with the students to draw out the implications. For example, create a pie chart to represent the almost ten thousand people who died and the proportion of those who were Māori. (The death toll for Māori was five to seven times that of Pākehā.)

Subsequent readings How you approach subsequent readings will depend on your reading purpose. Where possible, have the students work in pairs to discuss the questions and prompts in this section.

The teacher

Support the students to review the charts on which they recorded their questions and answers.

- *How did you find the answers to your questions? Were the answers in the body text or in the supporting information? Were you told directly or did you have to find clues and put them together with what you already knew?*
- *Are you left with questions?*

Direct the students to reread the text on pages 24, 28, and 29. Ask them to identify places where the author expresses uncertainty, for example, about how the flu came to New Zealand, the effect of the spray chambers, and when another epidemic may take place. Help them connect this to the idea that asking and answering questions is an important reading strategy that it is also critical to developing scientific knowledge.

- *What do these parts of the text have in common?*
- *What do they tell you about the state of knowledge about pandemics now and in the past? What do scientists and public health people know now that they didn’t know in 1918? What questions do they still have?*
- *What have you learnt about how scientists and public health researchers add to our knowledge? What do they need to know to be sure something is true?*
- *Why do you think the author wrote this article?*

The students:

- review their charts and reflect on what they learnt and how they learnt it
- identify and reread parts that reflect a lack of certainty in our knowledge about the pandemic and when another may take place, examining the use of quantifiers and how they effect our understanding
- make connections between the strategies for reading and strategies for investigating in science
- reflect on the author’s purpose, connecting these thoughts to what they know about the nature of scientific knowledge.

Subsequent readings (cont.)

The teacher

Explain the procedure historians follow when interpreting photographs: observe, reflect, and ask questions. Use a chart like the one at the end of this TSM to work through this procedure to interpret the first photograph with the students.

When you are confident the students understand the procedure, have them try it with the other photographs. Use a Jigsaw approach, where each group takes one of the photographs and reports back to the rest of the class.

After each group has shared what they have learnt, prompt them to compare their approach to reading the text with reading the photographs. Draw out the importance of asking questions, making connections, and thinking critically. Help them to transfer their learning to other times they engage with photographs, such as in newspapers.

- *What information did the photographs give you that you didn't get from the text?*
- *This is the procedure historians use when reading photographs. When might you use it?*
- *How might this approach help when reading other visual images?*

The teacher

Return to the discussion of the photograph of the influenza memorial. Explain that the story “Kāhuipani”, also in this Journal, provides us an opportunity to learn more about the influenza epidemic, this time from the perspective of a young girl from the Waikato iwi. Prompt the students to review the questions they recorded in their chart.

- *Does reading the story help you to think through answers to any of your questions?*
- *What has the story added to your understanding of the experience of the epidemic, especially from the viewpoint of children?*
- *Have the students read “Kāhuipani” and discuss what they get from reading the story that they didn't get from reading the article – and vice-versa. Create a PMI chart to set out the advantages and disadvantages of the two approaches for communicating information and increasing understanding about an important historical event.*

METACOGNITION

- *Show me a place where you were able to make a connection between the text and an experience of your own or some knowledge you already had.*

The students:


- learn and apply the procedure historians use to “read” photographs (See “Six Photos” in the *School Journal*, Level 3, August 2016, for more on this topic.)
- use the procedure to draw information from the photographs in the article
- share what they have learnt from the photographs and how this added to what they learnt from the text
- reflect on the similarities and differences in reading visual and written text
- consider how they might transfer what they have learnt to other times they engage with visual images.


The students:


- read the story “Kāhuipani”
- review the questions they generated while reading the article and reflect on how a story can add to their understanding
- compare the story with the article and reflect on the advantages and disadvantages of each approach for communicating historical events.

GIVE FEEDBACK

- *You asked some very deep questions that don't have easy answers. Your question about why there are so few memorials for people who died in the epidemic compared with people who died in the war is an important one. It shows that some questions can't be answered by reading just one or two texts.*

 **Reading standard: by the end of year 8**

 **The Literacy Learning Progressions**

 **Assessment Resource Banks**

Instructional focus – Writing

English Level 4 – Language features: Use a range of language features appropriately, showing an increasing understanding of their effects.

Text excerpts from
“Pandemic: The
Deadly Flu of 1918”

Examples of text characteristics

Teacher (possible deliberate acts of teaching)

Page 26

Killer Strain

It became clear very quickly that the 1918 strain of the flu was not the common illness people were used to. Whereas most flu viruses hit young and older people hard, this one was claiming mostly twenty- to forty-year-olds. Some were dying within twenty-four hours, when the flu usually took a week or longer to cause death.

TONE

Tone is the attitude of an author that is reflected in their writing. Examples include anger, humour, kindness, or sympathy. Tone is revealed through the author’s choice of words. If the words were to be spoken aloud, it would also be revealed through the tone of voice. In this extract, words associated with death and violence indicate that the author feels very strongly that the flu is a terrible killer.

Explain the concept of tone and ask the students to identify how the author feels about the flu epidemic. Give the students sticky notes and ask them to work with a partner to locate and mark the words and phrases that set the tone. Get them started by pointing out the title.


- *What does the title suggest about how the author feels about the flu pandemic? What key word conveys this to you?*

Have the students share and discuss their ideas about the author’s tone and how it is conveyed.

- *What do you notice about the words and phrases you identified? Is there a common theme?*
- *What do you think about the tone of the article? Why do you think the author writes in this tone?*
- *Informational texts don’t usually carry this much emotion. Is it justified? Are there enough facts to balance the emotion?*

Students could identify a word chain by noting the various ways that the influenza pandemic is mentioned, for example, “deadly flu”, “unknown strain of the influenza virus”, “global pandemic”, “1918 flu”, “killer virus”. Discuss what the word chain reveals about the author’s position on the flu pandemic and how it affects her tone of voice.

Support the students to start planning a written response to the article. Encourage them to think about their audience and purpose and the tone that will help them to achieve their purpose.

DIGITAL TOOLS  The students could plan their writing using an online mind mapping tool, such as [MindMup](#).

Page 23

It’s thought that the new strain of flu was first spread by soldiers travelling from North America to Europe in early 1918.

VOICE

In most English sentences, the subject carries out the action stated by the verb. Because the subject acts on the verb, we call this the active voice. In sentences written in the passive voice, the subject is acted on by the verb.

Sentences in the active voice flow more easily and are more direct. However, there are times when good writers will deliberately use the passive. This is especially the case in academic or scientific writing.

Clarify the students’ understanding of the difference between the active and passive voice.

- *In a sentence written in the passive, the object is acted upon by the verb: “The glass was broken by me.” In an active sentence, the subject performs the action stated by the verb: “I broke the glass.” To test if a sentence is written in an active voice, ask the question: What is being affected by the verb?*
- *Readers often prefer sentences written in the active voice because it is easy to see who did what. But sometimes writers don’t want to say who performed the action. (“The glass was broken.”) They might not know who broke it. They might think it doesn’t matter, because the action is more important than who did it. Or maybe they don’t want to admit that they broke the glass!*
- *The passive voice is used more often in academic or scientific writing than in writing to entertain. It can sound authoritative, but it can also sound vague and be a way of avoiding responsibility.*
- *Model how you could rewrite this example in the active voice: “It’s thought that soldiers travelling ...”*

Have the students find other examples in the text where the writer has used the passive voice. Have them identify why the passive was used and attempt to rewrite the sentences in the active voice. (See page 2 for some examples.) *What happened when you changed to active voice? Do you think the sentence was better in the active voice or the passive? Why is that?*

Have the students share and discuss what they learnt. Then have them review the initial draft of their own writing.

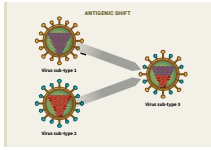
- *What was the purpose of your writing? Which voice did you use? In light of your purpose, was this the right choice?*
- *What happens if you rewrite your active sentences in the passive voice or vice-versa? What effect does the change of voice have on the reader?*

Text excerpts from
“Pandemic: The
Deadly Flu of 1918”

Examples of text
characteristics

Teacher
(possible deliberate acts of teaching)

p. 25: The diagram



VISUAL INFORMATION

Visual information such as diagrams, maps, and photographs can support the text and help clarify an idea that may be hard to explain in words.

Ask the students to draw a diagram or find a photograph to explain an idea or process in their writing.

- Are there ideas that you are finding difficult to convey in words? Would they be clearer if you included a diagram or a photograph?
- If you are drawing a diagram, what do you need to do to ensure the diagram is easy to follow?
- If you are going to include a photograph, how will you help readers understand what it means? How will you tell us the source of the photo?
- What do you want readers to notice? How could you help them?

Ask them to share the image with a partner and see if it is clear to them.

GIVE FEEDBACK

- You've been thoughtful about your use of the passive and active voice. When writing about when a pandemic might happen again, your use of the passive adds to the sense that this is a big unknown. But when writing from your imagined personal experience, you've used the active voice, and that helps me clearly understand who did what.

METACOGNITION

- You decided that your audience would be your future children and grandchildren. How did that affect the tone of your writing? How might it have been different if you were trying to persuade a local politician to put up a memorial?



Writing standard: by the end of year 8



The Literacy Learning Progressions

Interpreting photographs

Subject/title of photograph	
<p>Observe: Look carefully at the photograph.</p> <ul style="list-style-type: none">• What factual information can you get from this photograph? (who? what? when? where?)• What do you notice first?• What else can you see?• What people and objects are shown?• How are they arranged?• Can you see any text? Are there words? Signs? Symbols?• Are there details you cannot identify?	
<p>Reflect: Think about the photograph.</p> <ul style="list-style-type: none">• What other thoughts do you have about this photo?• What other knowledge can you add to what it shows?• Why do you think the photo was taken?• Who might have taken it?• When was it taken?• Where?• What is happening?• What do you notice about the way it has been composed (arranged within the frame)?• What is the focal point – the part in clearest focus?• Who was the photo taken for?	
<p>Ask questions: Bring together what you can see, what you know but can't actually see, and what you don't know to ask questions about the photo.</p> <ul style="list-style-type: none">• What is missing from the photo?• What happened a moment before the photo was taken?• What happened a moment after?• What does the photo make you wonder about?	