Asthma

by Denise Silk-Martelli

Overview

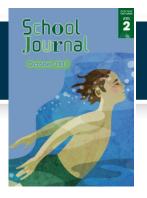
Texts related by theme

This article explains what happens during an asthma attack, what triggers asthma, and how people control it. To help readers connect the information to a real-life context, the article includes the example of a specific person's experiences. Amber and the narrator describe how she manages her asthma, how other people can help, and how she is able to participate in everyday activities. The article also includes diagrams and photographs to support readers' understanding.

School Journal

Year 4

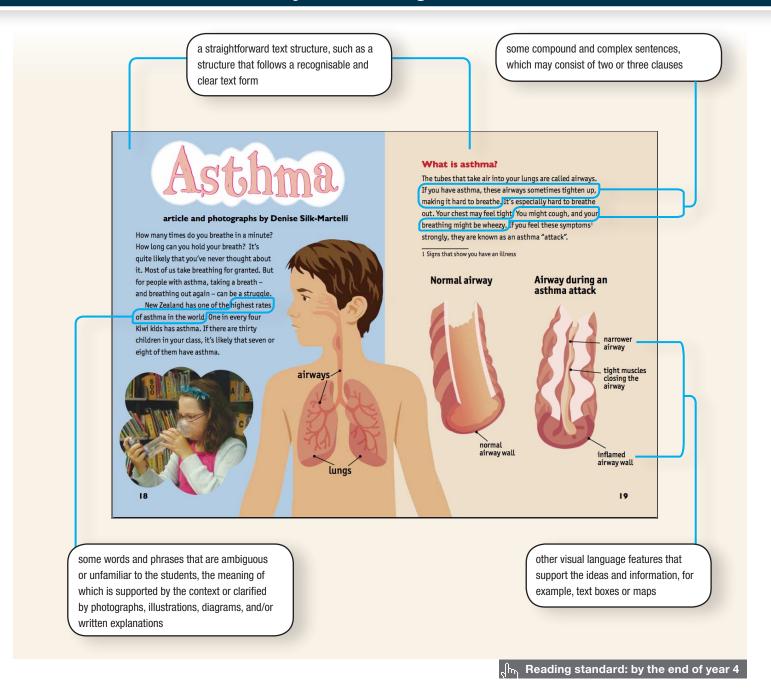
Level 2, October 2011



"At the Hearing Clinic" SJ 1.3.08 | "Goosebumps and Butterflies" SJ 1.4.10 |

Text characteristics from the year 4 reading standard

"Mighty Muscles" SJ 1.2.11



Possible curriculum contexts

HEALTH AND PE (Personal Health and Physical Development)

LEVEL 2 – Safety management: Identify risk and use safe practices in a range of contexts.

ENGLISH (Reading)

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

ENGLISH (Writing)

LEVEL 2 – Structure: Organise texts, using a range of structures.

Possible reading purposes

- To learn about asthma
- · To identify the risks involved with asthma and how to manage them
- To recognise actions we can take to support other students with asthma.

Possible writing purposes

- To describe the preventative measures taken by people with asthma
- To research and describe another ailment or condition
- To describe times we have identified and managed risks in our lives.

See Instructional focus – Reading for illustrations of some of these reading purposes.

See Instructional focus – Writing for illustrations of some of these writing purposes.

${}_{ m c} { m hr}_{ m h}$ The New Zealand Curriculum

Text and language challenges

VOCABULARY:

- Possible unfamiliar words or phrases, including "Asthma", "breathe", "breath", "take for granted", "struggle", "highest rates", "tighten up", "especially", "cough", "wheezy", "symptoms", "strongly", "attack", "narrower", "airway", "inflamed", "mucus", "muscles", "triggers", "cigarette", "dust mites", "inhalers", "control", "preventers", "relievers", "medicine", "spacer", "exercise", "karate", "upright", "adult", "ambulance", "Olympics"
- Possessive apostrophe and omission apostrophe, including "It's", "you've", "Amber's"
- Words possibly familiar in oral language with different meanings in an asthma context, including "tubes", "attack", "relievers", "plan".

Possible supporting strategies

Identify the vocabulary that the students need support with to understand this text **and** the language that they are likely to encounter in many contexts. Focus vocabulary learning on the latter. Offer the students guidance on which words are most important for them to learn (and which are very low frequency and not such a priority). *The English Language Learning Progressions: Introduction*, pages 39–46, has some useful information about learning vocabulary.

Before, during, and after reading, begin or continue charts and diagrams with language relating to the body. If appropriate, you could assign subtopics (such as parts, characteristics, actions, illnesses) to small groups or pairs and then have them share their information and create a class chart or poster.

Use the diagrams on pages 18–19 to give the students the opportunity to explore the language and content of this article orally before reading. Ask them to think, pair, and share to describe (in their own words) what they see in the diagrams and to make predictions about what the article will tell them. As the students share their ideas, feed in some of the key vocabulary for the text and begin a vocabulary list for their work with this text (and perhaps this topic).

Discuss known words that have different meanings due to the context. Prompt the students to identify connections between the word usages in different contexts.

Explore root words, affixes, and related words, for example, breath/breathe, prevent/preventers. Some students may find it useful to create word family tables with columns for noun, verb, adjective, and adverb and to explore sentences using different forms of the words.

SPECIFIC KNOWLEDGE REQUIRED:

- Knowledge of asthma or someone who has it
- · Experience with identifying and managing risks.

Possible supporting strategies

Invite guest speakers with experience of asthma, including family and friends. If appropriate, and being sensitive to the individual, ask the students to share their experiences of asthma. Provide opportunities for students who share a first language other than English to discuss the topic in that language. If appropriate, provide reading material about asthma in students' first language to explore and discuss before reading this text.

Identify and discuss times when students have identified risks and taken steps to manage them, for example, on class trips, at playgrounds, when crossing the road, and so on.

Remind the students of other texts they have read that included diagrams. If required, explicitly teach how to interpret diagrams and how they support the text.

TEXT FEATURES AND STRUCTURE:

- Photographs, headings, and labelled diagrams
- A three-part diagram
- Complex punctuation colon and brackets; number and footnote; inverted commas; paired dashes
- Use of bold type
- Use of modal verbs ("can", "may", "might")
- The use of questions to open the text
- The structure of the text as an information report (pages 18–20) with a description of Amber's asthma as a specific example (pages 21–23).

Possible supporting strategies

Remind the students of previous texts they have read that include diagrams and headings. Link to strategies they know to support their reading of these texts.

Discuss the purpose of footnotes, supporting students to locate the number and the definition.

Supporting English Language Learning in Primary Schools offers ideas for helping students with the language features of describing and includes the information report (pages 8–13 in the year 3 and 4 guide, and pages 10–17 in the year 5 and 6 guide).

In *English Learners, Academic Literacy, and Thinking: Learning in the Challenge Zone* (Heinemann, 2009), Pauline Gibbons classifies "Factual genres", including "information report", and offers descriptions of some of their features (page 175).

Sounds and Words

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Instructional focus – Reading

Health and PE (Personal Health and Physical Development, level 2 – Safety management: Identify risk and use safe practices in a range of contexts.)

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

Text excerpts from "Asthma"

Students (what they might do)

Students make connections

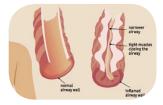
They locate and evaluate

understanding of asthma.

information to confirm their

between the text and diagrams.

The tubes that take air into your lungs are called airways. If you have asthma, these airways sometimes tighten up, making it hard to breathe.



She says, "I used to get scared and start crying when I felt wheezy, but now I've learnt to stay calm and use my inhalers."

Students infer that feeling "wheezy" is something that happens to people during an asthma attack. They make this inference by using the context and subsequent information in the sentence. They *infer* the meaning of "wheezy" by making connections to information earlier in the text and to their prior knowledge about asthma attacks.

Can asthma be controlled?

Students use headings to navigate the text in order to locate and evaluate information to answer questions. After reading this heading, students have expectations about the information that will follow. They predict they will learn whether asthma can be controlled.

If you feel these symptoms¹ strongly, they are known as an asthma "attack".

Students notice the footnote and *locate* the corresponding symbol at the end of the text. They use the definition provided to confirm or clarify the meaning of "symptoms".

METACOGNITION

- At first you thought the diagrams looked complicated, but then you were able to talk about what was happening. What helped you to understand?
- There were some unfamiliar words in this article tell me what strategies you used to work them out.
- With a partner, talk about a part of the text that you found hard and the strategies you used to understand it.

Teacher

(possible deliberate acts of teaching)

PROMPT the students to use the diagrams to support their understanding of the text.

- It says in the text, "these airways sometimes tighten up, making it hard to breathe". Is there a part of the diagram that supports or clarifies that idea?
- · Remember to refer to the titles and labels for support.

EXPLAIN to the students how the three-part diagram works and how the lefthand diagram connects to the other two.

As you continue to read the text, use the diagrams to clarify or add to your understanding.

Discuss with students how the diagrams helped them to make sense of what happens in an asthma attack.

ASK QUESTIONS to the support the students' understanding of unfamiliar vocabulary.

- Amber says she felt wheezy. Have you heard that word before? Turn to a partner and tell them what you think wheezy means.
- If you were unsure about what it meant, what could you do to check?

DIRECT the students to use headings to locate information within the text.

This text has headings, which give us an idea of what we will learn in each part of the text. In pairs, skim through the text and read the headings.

For students who need support with using headings, and also support with scanning for specific information:

- Read the headings as a group.
- Make predictions about the content under each heading.
- Create questions (about specific information) that you think the text will answer.
- Scan the text to find answers to your questions, using the headings to help vou.

If necessary, explain and model scanning. Note that for English language learners, scanning may be a particularly challenging and important skill, especially if the script of their first language is very different from that of English.

EXPLAIN the purpose and location of footnotes.

- I see you've noticed the small "1" at the end of the word "symptoms". Have you seen a number like this before? It's a reference mark that directs readers to a footnote at the bottom of the text.
- Find the footnote. How does the footnote help us as readers?
- Footnotes give us extra information about words that may be unfamiliar.

GIVE FEEDBACK

- You two were able to quickly find the answer to your question about asthma. That was a good use of your skimming skills.
- I know you understand how the airways change during an asthma attack from your explanation.
- Referring to the diagram was an excellent strategy because it reinforced the information you were reading.

$\int_{m_1}^{m_2}$ Reading standard: by the end of year 4

The Literacy Learning Progressions

Assessment Resource Banks

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Instructional focus – Writing

Health and PE (Personal Health and Physical Development, level 2 – Safety management: Identify risk and use safe practices in a range of contexts.)

English (Level 2 – Structure: Organise texts, using a range of structures.)

Text excerpts from "Asthma"

How many times do you breathe in a minute? How long can you hold your breath? It's quite likely that you've never thought about it. Most of us take breathing for granted. But for people with asthma, taking a breath – and breathing out again – can be a struggle.

characteristics

Examples of text

INTRODUCTION

An introduction outlines the topic, engages the reader, and can, as in this case, encourage a personal connection. The introduction is where readers decide whether this text is what they want or need to read.

Teacher

(possible deliberate acts of teaching)

PROMPT the students to organise their writing.

- As writers, it is our job to provide clear information for the reader, so we
 need to be clear about what we are writing. We can use graphic organisers
 to help us organise what we want to write.
- Let's review the purpose of an introduction. Remember the features we identified in the asthma introduction.
- What is your purpose for writing? What will you need to include in your introduction?

They can be things like cigarette smoke, cold air, cats and other furry animals, dust mites, and physical activities like running or climbing stairs.

LISTS

Using a list within a sentence is helpful when there is a lot of information. The items in the list need to share a common focus (in this case, the triggers for asthma). Writing items in a list is more economical than using bullets and provides a flow to the writing.

What is asthma? Can asthma be controlled? Amber's asthma

HEADINGS

Headings help to guide readers through a text. They can also guide authors in organising their ideas as they write texts.

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LABELLED DIAGRAMS

Visual features such as a labelled diagram can help readers understand a complex explanation or description. The labels show the parts, and the text explains what they are, how they work, or why they are important. ASK QUESTIONS to support the students' use of structure and punctuation.

 As you read this sentence, what do you notice? How do you know where one item ends and the next one starts? How do the items in the list connect?

EXPLAIN the use of the "and" if students do not notice or are unfamiliar with its use in this instance. Identify a rule for listing sentences.

- When could you use a listing sentence in your writing? What effect would it have?
- Would it add to the writing? Would it be better to use a bulleted list?

ASK QUESTIONS to support the students to organise their information.

- What are the important points you want to include in your writing?
- Try using them as headings. How does this help you to organise your information?
- Could these headings help the reader to understand the writing?

MODEL the use of a labelled diagram to support a description.

• If I tried to read the text without the diagram, I'd have trouble understanding what the effect of the asthma was on our airways. The diagram has really clarified this for me.

You may need to help students decide which features to describe in words and which need an illustration to help the reader understand. Use examples from other School Journal articles to model different ways of using diagrams.

GIVE FEEDBACK

- Your introduction is clear and lets me know exactly what your article will be about. How will you expand on this?
- The headings you have used tell me what to expect in each section. This allowed me to skim-read easily.
- Your use of a list in a sentence has made the information easier to understand. It's really helped me to know what all the results are.

ရှကြ Writing standard: by the end of year 4 ရကြ The Literacy Learning Progressions

- How did using headings help you to organise the information? Has it improved your writing? How?
- What did you consider you needed to include in the diagrams? How did you make this decision?
- How did your planning help your writing? What would you do differently next time?