

Poisonous Spiders — Fact or Fiction

by Andrew Crowe

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Overview

Science expert Andrew Crowe overturns common myths about spiders in this lively and engaging report. The text is a great starting point if you want to explore ideas about how to evaluate the reliability of information when researching a topic.

Suggested Teaching Purpose

Based on the information I have about my students' learning needs, what would be an appropriate teaching purpose for this session?

Examples of an appropriate teaching purpose are listed below.

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| <ul style="list-style-type: none">To support the students in developing the comprehension strategies of making connections, summarising, and evaluating. |
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Features of the Text to Consider in Context

What features of this text would support the teaching purpose?

<ul style="list-style-type: none">The question on the contents page
<ul style="list-style-type: none">The information about spiders
<ul style="list-style-type: none">The main idea (supported by three examples) that spiders are not in fact very dangerous to humans
<ul style="list-style-type: none">The explicit comparison of fact and fiction and the associated language used in this discussion, including “claim”, “not true”, “true”
<ul style="list-style-type: none">The informal, persuasive language (“In fact”, “As for being”, “There’s a story”, “so the story goes”, “it’s certainly not”, “But even then”), that includes the use of contractions
<ul style="list-style-type: none">The prompt for the reader to check the accuracy of the information (“You can check for yourself ...”)
<ul style="list-style-type: none">The topic-specific vocabulary
<ul style="list-style-type: none">The features of a report (including a title, headings, information organised into paragraphs under each heading, and a conclusion)
<ul style="list-style-type: none">The supportive layout (including clear photographs, fact boxes, the title, and the headings)
<ul style="list-style-type: none">The text boxes at the edges of the pages, two of which are also summaries of their respective sections
<ul style="list-style-type: none">The relatively short paragraphs, which facilitate summarising
<ul style="list-style-type: none">The commas and dashes that separate the idea within sentences
<ul style="list-style-type: none">Andrew Crowe’s reputation as a recognised expert in natural history
<ul style="list-style-type: none">The hyphenated words — “white-tailed”, “White-tails”, “daddy-long-legs”.

Readability

Noun frequency level: 11–13 years for guided reading

What features of this text might constitute challenges for my students? (For example, features that may require a prompt or a brief explanation.)

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| <ul style="list-style-type: none">The complex structure of some sentences, for example, “However, its bite sometimes leaves a swollen, red lump and, in the worst cases, a blister or an infected wound ...” |
| <ul style="list-style-type: none">The topic-specific language, for example, “white-tailed spider”, “poisonous”, “venom”, “swollen”, “blister”, “infected”, “daddy-long-legs”, “injecting”, “victim”, “katipo”. |

What prior knowledge would support my students in reading this text?

•	Their ideas about and knowledge of spiders
•	Their familiarity with the process of discerning reliable information.

Sharing the learning outcome and success criteria with your students

Learning outcome

I am learning to evaluate the reliability of information in a text.

Success criteria

I will be successful when I have:

•	summarised the information about spiders in this text;
•	compared what I believe about spiders with the information in this text
•	asked questions in my head about how reliable this information is and discussed ways I could check it.

A Framework for the Lesson

How will I help my students to achieve the learning outcome?

Before reading

•	Read the poem “Creepy” in SJ 3.1.05 and encourage the students to share their responses to it. Note that the responses are more likely to be emotional than intellectual! Use this as a springboard to brainstorm what the students know about spiders. Create a chart and record their ideas under the heading “What we know”. (Leave enough space on the right for another two columns to add later.) The students may challenge one another about what they “know”. If not, then prompt them to consider their ideas about spiders: “Are you sure about that? What makes you think that? How could you check if it’s true?” (Making connections; evaluating)
•	Tell the students you have a text for them to read that explores some common myths about spiders. You may want to cover the second and third text boxes with sticky notes before giving out the journals. These two boxes summarise the information in their respective sections, and the students can use them as a cross-check when they’ve created their own summaries. Give out the Journals and discuss the title and the blurb on the contents page. Discuss the differences between fact and fiction, referring to the previous discussion. Some students may recognise the author Andrew Crowe as a recognised expert. Have the students turn to pages 14 and 15 and note the headings and photographs. “Are spiders poisonous?” Ask the students to share their expectations about the position the author will take. “Why do you think that?” (Making connections; forming hypotheses)
•	Share the learning outcome and success criteria with the students. “How do we evaluate information when we read? What in-the-head questions will help us? Why is it important to evaluate information?” (Asking questions; evaluating)

Reading and discussing the text

•	Have the students read the section on the white-tailed spider and the associated text box. You may need to support them with the more complicated sentences, for example, the sentence that shifts in focus from “the bite” to “the newspapers” in the first paragraph. In this instance, point out the reference to newspapers at the beginning of the paragraph to help them link the ideas. If necessary, model how the commas help with phrasing (and hence units of meaning). (Making connections)
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•	Ask the students to work in pairs to identify the facts about white-tailed spiders. “How do you know what’s true here and not true?” Add the heading “What we found out” to the second column of the chart and record the facts the students have identified. Compare this information with the students’ ideas in the first column. Draw out the idea that “What we know” will probably need to become “What we thought we knew”. Changing the heading is a strong visual representation of the process involved in discerning reliable information. (Summarising; evaluating)
•	Discuss the way the introductory paragraph appears to back up common myths about the white-tailed spider. “What are you doing to evaluate this information? What does this section suggest about newspaper stories? Are they always right?” Draw out the idea that hearing a piece of information many times, including in news reports, doesn’t necessarily mean that it’s correct. (Evaluating)
•	Have the students read the rest of the text, summarising and recording the facts in each section and comparing the facts with their original ideas on the chart. “What are you noticing? Is this information raising any questions in your head?” (Summarising; asking questions)
•	After they’ve summarised the Daddy-long-legs and Katipo sections, have the students compare their summaries with those in the text boxes. (Summarising; making connections)
•	Before reading the final text box, remind the students of the title and have them think, pair, and share their ideas about the main idea of this text. “What message is the writer giving us? Are spiders poisonous?” Draw out the idea that spiders are far less dangerous than people think. “What evidence does the writer use to support this main idea?” (Summarising; identifying the main idea)
•	Have the students read the final text box (the conclusion). “How has the writer supported his main idea here?” You may need to support the students in distinguishing the “human” perspective here — “What is the writer saying here about humans and spiders?” Help them to come up with a summary statement, for example, “Humans don’t really need to fear most spiders — but spiders should fear each other.” The poem “Creepy”, which you may have read before reading this text, supports the idea of spiders having reason to fear other spiders. (Analysing and synthesising; summarising)
•	Review the ideas and information on the students’ chart. “Has reading this text changed your opinion of spiders? What helped you decide if the information was correct?” Draw out the idea that having an emotional response to something can cloud your judgment of it. “Why might a writer want to give incorrect information?” (Evaluating)
•	Have the students discuss whether they agree with the author, and give evidence for their opinions. This evidence could include their knowledge of the author as an expert on spiders. “If you weren’t sure whether the information was true, what are some ways that you could check?” In the section about the daddy-long-legs, the writer suggests observation as a way of checking. Discuss the use of other information sources, such as other texts (including the Internet) or experts. Add the heading “How we can check” to the third column on the chart and add the students’ suggestions. You could discuss the issue of validity of information on the Internet (where anyone can publish anything). (Evaluating; making connections)
•	Explore the writer’s informal style and use of persuasive language. “How does the author try to convince you that he is right?” Your students may have suggested that this sort of language is something to watch out for when determining how reliable information is. Discuss how persuasive language can be used to convey both accurate and inaccurate information — the former in this case. Draw out the idea that saying something in an entertaining or convincing way doesn’t necessarily mean it’s true. Make connections to the earlier discussion of misinformation being repeated in newspapers. (Analysing and synthesising; evaluating)
•	You could also explore language used in the text to discuss fact and fiction (for example, “claim” and “so the story goes”) and see if your students can come up with other possibilities. As part of this, you could brainstorm synonyms for fact and fiction, for example, “right”, “wrong”, “true”, “false”, “correct”, “incorrect”. (Analysing and synthesising; making connections)

- Work with the students to develop criteria to evaluate the reliability of information (for example, who the author is, the publication date, the type of publication, the quality and style of writing, the availability of other similar texts or supporting information, and if there is a list of references). “How would your thinking about this text have been different if you didn’t already know who Andrew Crowe is?” You could discuss how “facts” can change as scientific processes improve, which is why the publication date is important. You could mention old ideas that have since been overturned, like the idea that the world is flat. (Evaluating; making connections)
- Review the learning outcome and success criteria and reflect with the students on how well the learning outcome has been achieved. “What have you learnt about how to evaluate the reliability of information in a text?” Note any teaching points for future sessions.

Links to Further Learning

What follow-up tasks will help my students to consolidate and/or extend their new learning?

- If necessary, review any unfamiliar words and the strategies they used (or could use) to work them out. For example, for “venom” in paragraph 3, you could encourage the students to look for surrounding text clues such as “poisonous” and “dangerous”. If they have difficulty relating the idea of a “blister” to a spider bite, you could make the connection with chicken-pox blisters. (Inferring; making connections; building vocabulary)
- Your students could apply the “reliability criteria” they have developed to evaluate the information in another text they are reading. (Evaluating; making connections)
- Have the students compare how spiders are represented in various texts, for example, traditional tales about Anansi the spider and about Arachne who was changed into a spider, and books such as *Charlotte’s Web* by E. B. White (HarperCollins, 1999) and *The Kuia and the Spider* by Patricia Grace (Penguin Books, 1982). (Making connections; analysing and synthesising)
- Some students might like to explore arachnophobia (the fear of spiders) and how this fear drives how people represent spiders in art, books, and films. Examples are the “scary hairies” featured in the *Harry Potter* and *The Lord of the Rings* books and films. (Making connections; analysing and synthesising)

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