



Extracting key information from a scientific article at 'first glance'

Students learn about the basic structure and style of scientific articles by first testing their own ability to extract key information from such an article. The teacher led part of the activity will help students formalise their approach. It is important to note that the articles used here should be not be research papers, but should be less formal articles which are more accessible.

Outcomes

Students will be able to:

- apply techniques for browsing scientific articles
- show improvement in their ability to extract key information which can be used to ascertain the value of the article
- describe the structure of written articles and outline their functions.

Resources required

Catalyst article: A vaccine for malaria - downloadable from the SiS web site.

Time required

30 minutes

Outline of the activity

1 Before giving students the article tell them that they will be asked questions relating to it afterwards, but don't indicate what questions. Tell them that they are **not** allowed to annotate the article with notes, but they can write anything down on separate sheets of paper. Give students five minutes to read the article.

2 Tell the students to put the article away and give them the sheet to fill in. It is likely that most of them will struggle with this, and some may fail to answer any questions.

3 When most students have completed the briefing sheet to the best of their ability, get them into pairs or groups to mark their work. Allow them to mark by using the article to find the correct answers. If they are struggling, you could make it a teacher-led exercise, taking them through the article and identifying the correct answers as you progress.

4 Ask the students 'What is the typical structure of this sort of article?' There should be an introduction, a discussion, and a conclusion. This

won't always be the case, and you might ask students why.

5 This activity needs to be followed up by repeating it to reinforce knowledge. Issue a second article either for homework or during the lesson and repeat the steps 1 and 2, using a blank copy of the briefing sheet.

Tips and strategies



To counter the frustration that students may naturally feel if they initially struggle with this, make sure you frame the activities as being an opportunity for them to formalise their approach to reading scientific articles in the future. This will help to save them a lot of time and effort and will help them with their studies at A-Level and beyond.

Do point out to the students that they are not expected to read these articles in detail at this stage. They will get the chance to do so at a later stage.

This is an ideal opportunity for students to share their approach with others, passing on hints and identifying / eradicating bad habits.



Extracting information from a scientific article at 'first glance': briefing sheet

In this activity you will agree an approach to a 'first glance' of an article.

Complete this activity with the article you have just read out of sight. Don't worry, this isn't a test.

1 What was the title of the article? _____

2 Who was (or were) the author(s)? _____

3 What further information can you give about the author(s) (e.g. location, occupation, qualifications)?

4 In what year was it published? _____

5 Who is the publisher, or what is the name of the publication? _____

6 What type of illustrations were included? _____

7 What sort of symbols and formulae were used, if any? _____

8 Which of the following appeared in the article? (answer yes or no)

An abstract _____ An introduction or preface _____

A conclusion or discussion _____ A list of references _____

9 Write a brief summary of the main points of the article. _____

