Writing scientific articles for different audiences

Students revisit the skill scientific writing, this time with a focus on writing for a more general audience. This is akin to the sort of writing found in newspapers, magazines and some web sites.

Outcomes

Students will be able to:

• demonstrate an appreciation of the different language and writing style required for articles for different audiences
• write a summary article on a difficult A-level topic which is aimed at an audience of GCSE students
• communicate scientific ideas to individuals whose understanding of the underlying science is not as extensive as their own.

Time required

20 minutes introduction in class + homework

Outline of the activity

The task requires students to write an article for an audience of GCSE science students. You may wish to review the differences between a scientific article and a scientific paper. Students should also consider the difference a GCSE audience will make to the style and of their writing. With the class you may wish to construct success criteria for the activity. An example is listed below.

A good GCSE Science article should be between 500 and 1000 words long and include:

• an explanation of the background of the topic
• why the topic is important to them
• sentences and paragraphs concise and punchy
• topic sentences at the beginning of paragraphs
• language a GCSE student would be familiar with
• helpful images.

1 Start by getting students to read the section in the SiS AS student book on natural selection. You might also provide an article generated for a general audience, such as a popular science journal.

2 Ask the students ‘How does the content and style differ from the scientific articles we have looked at previously?’

3 Issue the student briefing sheet. There is space on the sheet for students to make notes when you outline the topic and run through your requirements - you can tailor the guidance to the topic/specification you are teaching. The task of writing the article can then be set as a homework.

Students first write an article on natural selection for GCSE students. The main body of the article should be written so as to be accessible to all GCSE students. Students then write a ‘Science in-depth’ section at the end presenting the A-level aspects of the science, still using language appropriate to the audience.

Then students summarise the article in 100-150 words (with one diagram/illustration) to explain the significance of the topic to primary school students. This will involve the students using a range of skills that they have developed during the LSS activities.

If possible, part of the assessment should include showing the article written in part 1 to some GCSE students, particularly those who have expressed an interest in studying A-levels. These articles could be combined with posters from the ‘Preparing a scientific poster’ activity to form part of an ‘A-level taster day’ for GCSE students interested in further study.

Tips and strategies

No attempt has been made to write a guidance sheet specifically for an advanced-level topic owing to the wide variation in the requirements of the different exam boards in this area.
Writing scientific articles for different audiences: briefing sheet

Part 1
You will write an article on natural selection for a magazine or web site which is aimed at GCSE students. Information on the structure of your article is given below, and there is space for you to make notes on the scientific topic and content that you are writing about which your teacher will cover.

Structure of the article
The main body of the article should be written in a style that any GCSE student should be able to understand. You should explain the background to the topic, and why it is important to them and to the rest of us. It is helpful to include images, and to keep sentences/paragraphs concise and punchy. The article should be between 500 and 1000 words long.

At the end of the article, you should write a section called ‘Science in-depth’ where you present advanced-level aspects of the topics, including equations and formulae if appropriate and examples of calculations if this is relevant. You should still try to write this in a way that a bright GCSE student will be able to understand.

The topic and scientific content
The topic your article is going to be on is natural selection.

You must cover the following material from your SiS specification: ..............

Further requirements of your work (e.g. illustrations, formulae, equations) are: ..............

Part 2
You will write a 100-150 word summary of this article to explain to Year 6 primary school students why natural selection is important to them. You should include some simple scientific ideas, and one illustration. (If you are unsure what level these students are at, do some Internet research on the material examined in Key Stage 2 Science SATs.)

Write three main points summarising the differences in writing for these two audiences. Discuss this in your class.