As well as a good science encyclopaedia, all classrooms need a science dictionary, preferably with pictures and graphs as well as clear and correct explanations. Consulting a dictionary and following up cross-references encourages further reading, promotes independent research, and advances students’ understanding of copyright issues and correct citation methods when using such information resources – as well as giving the teacher a break from endless questioning.

Two trusted reference publishers, Oxford University Press (OUP) and Harper Collins, have new editions of their science titles on the market, both of which might be worth owning, as their focuses are slightly different.

The Collins Internet-linked Dictionary of Science: Science Defined and Explained concentrates more on biological and human-related topics in somewhat simplified terms, and, as the introduction claims, is written to “provide a guide to the vocabulary of modern science and (...) enhance the reader’s understanding of science”.

Cross-references are clearly marked with asterisks, and an advantage of this dictionary is that it contains a number of longer review entries including images in the style of an encyclopaedia. Easy to read, the Collins dictionary contains many illustrations and tables, mostly about biological and medical topics. The last four pages also list Internet links to worldwide scientific institutions and organisations. These could be a useful resource for students.

Though there’s no thumb index, it’s clearly laid out and easy to find your way around. While it would be an ideal dictionary for younger students, the Collins dictionary suffers in that explanations are often oversimplified, affecting accuracy, while at other times there’s no explanation for complicated vocabulary used in the definitions.

On the other hand, Oxford University Press’ experience in science dictionaries is clearly visible in the well-organised reference system and accuracy of A Dictionary of Science. It leans more towards physics and chemistry topics, and “aims to provide school and first year university students with accurate explanations of any unfamiliar words they might come across in the course of their studies”, as the introduction claims.

As well as providing accurate explanations, the Oxford University Press dictionary provides in-depth cross-referencing tools such as ‘compare’, ‘see also’ and synonyms for each entry. There aren’t many illustrations and tables, and those that are there explain mainly physics and chemical processes, but definition vocabulary is correctly cross-referenced, and the content is reliably accurate while still understandable and easy to read.

At just under UK£10 each, both these dictionaries would be a valuable addition to the classroom, although the OUP publication edges ahead thanks to its detailed accuracy and cross-referencing possibilities.

Details

A Dictionary of Science
Publisher: Oxford University Press
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Collins Internet-linked Dictionary of Science: Science Defined and Explained
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