

Using ICT to find, evaluate and use scientific information

Evaluating scientific information found on the Internet

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Introduction

The Internet contain a vast, and growing, body of (usually) free information. In addition, the Internet can be used to access information from all over the world. Both of these features make it attractive as a resource for science teaching. However, the Internet has no quality control – because it is easy to post information to the Internet, increasing numbers of people are doing it. The information may be biased – or just wrong – and may be presented in a way that makes it unsuitable for use. For example, some Internet sites make extensive use of pictures – even animated ones – and while this may make them more attractive it also greatly slows down the speed with which they can be accessed, therefore lowering their utility.

Because of this, the ability to evaluate the information found on the Internet – for accuracy, bias and quality – is an increasingly important skill for teachers and pupils.

In this part of the module, you are set two related tasks, both of which have been used in the classroom.

In the first, you are asked to review two sites relevant to science education from a given list and then to share your opinion of both the sites and the form used to review them with others.

In the second task you are asked to visit one of three sites in which teachers have reviewed science-related Internet resources for other teachers. You are asked to find one resource which, on the basis of the review you feel is relevant to your current teaching and inspect it for yourself – comparing your view with that of the reviewer. Finally you are asked to share your opinion of the review, and of the site it came from, with others in the group.

You should start this module by going to the '[Tasks](#)' section. It is intended that everyone should be able to complete this. For those who wish to take things further there is a section '[To learn more about evaluating web-based resources](#)'.

The Tasks

Task 1

Your task is to evaluate two sites from different sections of the '[Science Links](#)' page using the set of questions developed by Rebecca Wilson of the Information Services department of the Institute of Education and then to post your evaluations and your reflections on the process, to other members of the group using the first class system.

To complete the evaluation sheet, you should [download](#) it, complete it on the computer (it is a Word document) and then print and save it before posting the completed form to First Class.

In addition to the completed forms you should add a brief note describing the changes (if any) you would make to the evaluation form to make it more valuable in evaluating science-specific sites.

Task 2

You should go to on (or more if you have the time) of the three sites listed in the section '[Reviews by other teachers](#)' and search the database for a site relevant to your current teaching.

Then, go to the site and form your own opinion of it and compare it with that of the reviewer.

Finally, send a message to the group (using FirstClass) in which you outline:

- The topic on which you chose to look for information
- Which of the three sites given you chose to look at
- How easy it was to find information on the topic you had chosen
- Which Internet resource from the list of reviews you looked at
- How useful/accurate you found the review
- The strengths and weaknesses of the review form used compared to the one you used

Reviews by other teachers

There are three main sources of reviews of web-based resources by and for science teachers:

1. The [Association for Science Education](#) has a [review of websites](#) relevant to science education.
2. The [Virtual Teachers' Centre](#), contains a growing list of [reviews of science-related sites](#) which it also indexes through Key Stage and NC strand. Teachers are invited to contribute reviews to this list using the VTC's own [review form](#). You may wish to adapt and send the ones you have done.
3. [Becta](#) has a collection of [website reviews](#) for a number of curriculum subjects completed by the teachers involved in the [TRENDS](#) project and lists its [guidelines for evaluating](#) them.

In addition to these sites – which directly relate to task 2, two other sites may be of interest:

- 1 The [National Grid for Learning](#) (on which you could also [register](#)) has a [software review](#) database for curriculum subjects.
- 2 You could [register](#) on the [TeacherNet](#) site and examine its links sites relating to the use of the Internet in schools.



To learn more about evaluating web-based resources

For on-line tutorials on evaluating web pages you could go to a number of sites, including those by [Mantex](#) and the [Social Science Information Gateway](#). While these are not science-specific they do set out sensible questions to ask of a site. [Colorado University](#) has produced a useful introduction to a typography of web pages. This considers the different purposes (e.g. advocacy, informational) for which web pages are written and provides a guide to recognising these. This could be very useful were your students to be searching the net for information on topical issues - e.g. the environment.