



Students as Researchers

Reading Skills

Sometimes students struggle with research because science articles can have a high reading age. Sites such as <u>www.readable.io</u> and <u>www.rewordify.com</u> are useful for teachers and students in making material more accessible to younger readers. You can follow a tutorial which shows how these online tools can be used by both you and your students to reduce the reading age of articles by clicking <u>here</u>.

Many students might have limited experience in reading factual material for comprehension. Some classroom strategies which can be used to develop students' capacity to engage with science writing can be found <u>here</u>.

Beginning to Search

While general websites such as Google and Yahoo are useful, refining a search can help students narrow the field of results. To help students with this, you might like to refer to our resource providing tips for successful internet searches (<u>here</u>).

It may be useful for novice researchers to begin with some sites that are suitable for students of secondary school age. You may wish to initially guide students towards websites which have **only science content** and are **designed for young researchers and readers**. Later, your students might extend their search to a more expansive site. Finally, when they have developed the skills of assessing reliability of source, they will be able to move to more general websites and search engines and make judgements as to the reliability of what they are seeing or reading and its relevance to their research.

Some search engines and host sites which might help your students are listed on the next page, with a brief description of what they host. Click on the image to go to the site.



An tSraith Shóisearach do Mhúinteoirí



Some Sites for Students

Web Link	Brief Description
	This Kids Ahead site is a source of articles on STEM-related issues. Articles are written with children in mind and are reading-age appropriate.
ScienceNewsforStudents	Science News for Students is a rich source of science research across a wide range of topics.
FOR YOUNG MINDS	Frontiers for Young Minds is an online journal which provides a collection of scientific articles by distinguished scientists edited "BY KIDS FOR KIDS"
SCIENCE JOURNAL KTDS HYPERLINK "http://www.sciencejournalforkids.or g/"	This journal provides cutting edge, peer-reviewed environmental science research ADAPTED (reading age appropriate) for students and presented as a series of pdf articles which can be downloaded and printed.
Readable, Teachable News.com News.	This site is about news in general and was set up to develop news articles for children between the ages of 7 and 14. The science section has some excellent articles on issues of climate among other things. An excellent start to stimulate thinking about science in the news.
Wikiliow to: Sourch Ardice Edit Decuas Home : How to Recognize Bias in a Newspaper Article Nome : Image: Constitute and Answer When all you want is the facts, navigating the newspaper might be a tricky ord bas is the result of laziness, and sometimes if's a deliberate attempt to push a of wew. Ether way, you should always be on the lookout for bias.	This site outlines a number of steps to take in deciding whether a newspaper article is reliable or not.



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C S S S S S S S S S S S S S S S S S S S	This "Young Scientists" Journal provides opportunities for students to access research by other students and also to publish their own science research.
☐ScienceBlog	Great site to introduce your students to blogs and for them to begin exploring the concepts of reliability, accuracy and bias in blogs. They might also like to become bloggers!

Search to Research

Once students have begun to develop the skills of **searching for information** they can then move on to develop their **research skills** including:

- Discriminating between sources,
- > Documenting sources used, presenting justification,
- Analysing points of view,
- > Drawing conclusions and communicating a personal opinion, based on evidence.



