

## Studying in the Sciences

### How to evaluate sources of information

#### Introduction

When you start to work on an assessment task you should already have developed some ideas about the topic. Most of the new information you research for any assessment will come from what you read. All the new information you come across then mixes with what you already know. As a result of this process the views and opinions you started with will either be reinforced or will change.

As you research you will also come across material from a variety of sources and with different views. Sometimes these views will contradict each other. If two people say things that contradict each other, can they both be right? How do you know which one is more likely to be right?

What criteria can you apply to evaluate this material? How true or how valid is it?

In your assessments you want to use the best information you can find. The following sections will provide some guidance on determining the most appropriate information for your purpose.

#### One way to evaluate your sources of information

One effective way to read critically is by applying the 3Rs test: RRR – is it *relevant*, *reliable* and *recent*? If a source of information meets each of these criteria, then it is probably useful for your assessment.

##### Relevant

For something to be *relevant* it must be closely related to the topic you are researching. The reading list your lecturer has provided for a topic is a good place to start looking for relevant sources. A big part of the selection process has already been done for you since the reading list has been put together based on its relevance.

##### Reliable

In academic writing *where* something is published is very important. Consider what kind of publication your source is. Is it a *book* or a *chapter* in a book? If so, who is the publisher? Is it an article in an *academic journal*? Is it from Wikipedia? Is it from someone's blog?

The reason these questions are important is that you need to apply some test of *quality control* to your sources. For example, articles in reputable academic journals will have been *peer reviewed*. This means that before the article is accepted for publication it is sent to (mostly) more than one person who is an expert in the field. They then write a report on whether or not the article should be published. The journal's editor then uses these reports to decide whether or not to publish the article. A similar process happens with academic books, and the chapters in them, which have been published by well-known academic publishers.

The peer review process is a very good indicator that the writer of an article (or chapter) has met a high enough standard in how they have done their research and that their conclusions are based on sound interpretation of evidence.

On the other hand, in a blog or a 'tweet' anyone can write anything they like with no quality control at all.

##### Recent

Another test for a source of information is how recent it is. New research builds on research that has already been done. Therefore, articles which have been published more recently are more likely to be closer to the state-of-the-art in their field. This does not mean, however, that just because an article is newer it is better. It has to satisfy the other criteria as well.

Check the *SCU Learning Zone* for more related Quick Guides.

#### Learning Experience Team

 learningzone@scu.edu.au

 +61 2 6626 9262



**Southern Cross  
University**