MONASH University
Engineering

Why do we reference in Engineering?

Referencing: Why Bother?

Referencing provides a map of knowledge, a web of pathways in knowledge that each researcher extends. It means that we don't have to find out everything for ourselves all over again; we don't have to reinvent the wheel. In effect, it multiplies knowledge exponentially.

Academic Referencing

Scholarship depends on the sharing of knowledge and the questioning of knowledge. It depends on trust and doubt.

Trust

To share knowledge effectively we need to be open and honest about the knowledge we have gained from other sources. We need to make it easy for the reader to locate and examine our sources. By doing this we avoid plagiarism (http://www.monash.edu.au/lls/llonline/writing/information-technology/sources/2.2.xml), which means *to take and use another person's ideas or work and pass these off as one's own by failing to give proper acknowledgement.*

We need to recognise and honour the contribution of others. Furthermore, when we link our work to other work in this way, we put our own work in context and allow distinctions and comparisons to be made. Also, good a referencing technique demonstrates your skills as a researcher. It shows that you know your way around the world of knowledge. Using direct and indirect quotes (http://www.monash.edu.au/lls/llonline/writing/information-technology/sources/2.4.xml)

Doubt

We can't check the truth of everything so in the spirit of scholarly trust we use other research to build our own work. But there is no obligation for others to accept what we say. They might want to check the references that we have used to judge the accuracy or validity of the referenced work, to make sure we have used it fairly and accurately, or even to make sure that we haven't completely made it up.

Other researchers/your lecturers don't have to trust you. They need to be able to check that you aren't just making up sources or surveys or data or even entire life histories. This happens from time to time in the academic world. See, for instance, Bryan Martin's essay : Scientific Fraud and The Power Structure of Science (http://www.uow.edu.au/arts/sts/bmartin/pubs/92prom.html) which recounts a number of interesting case studies, and see the case of Ashoka Prasad (http://www.abc.net.au/rn/talks/8.30/helthrpt/stories/s11681.htm)

Non-Academic Forms of Referencing

Acknowledging sources is important in the world of scholarship but the skills that you learn in referencing at university are not just an academic ritual. They carry over into the commercial and industrial arena. For instance, as an engineer you may one day come up with a brand new process or product that will make you a lot of money and make the world a better place.

However if you do not properly source all the steps that lead to that invention, the odds are that your patent could be denied and somebody else will jump in and claim it. A lot of lawsuits and a lot of money can hinge upon a faulty or misleading reference or the absence of one. Acknowledging your sources is an important skill not only in the academic world but also in commerce and industry.

Referencing Conventions

Different disciplines have developed different referencing conventions – even within the broad field of engineering, eg the number system, the Harvard system. These might, to the beginning student, seem totally arbitrary and merely designed to confuse. Fortunately these days, as long as you use the same system consistently throughout your piece of work, lecturers tend to be fairly flexible in their attitude. You should always check with your lecturer about particular discipline or subject conventions. If you are a postgraduate, your supervisor will advise you – and you will get used to using the conventions as you submit papers to journals with their own style requirements.

You might notice that scientific/engineering disciplines tend to highlight the date that a work was published whereas humanities disciplines may prefer to highlight the author or the title. This is because in science you need to know what is the most up to date work in the field, whereas work in the humanities can still retain its validity after hundreds or thousands of years, so the date is less crucial.

In any case, the main principle in referencing and citation is to be consistent, to follow a set pattern, and to make it easy for the reader. For the various conventions used in engineering at Monash, go to the Library website http://www.lib.monash.edu/tutorials/citing/engineering.html. For some more general information on the principles and practice of referencing and citation, the Monash Library has a tutorial at http://www.lib.monash.edu/tutorials/citing/

For information on integrating your references into your text, see LLOnline – Integrating References http://www.monash.edu.au/lls/llonline/writing/information-technology/sources/2.5.xml

Improving your Technique

Referencing should not be treated as an add-on. It is a crucial part of academic work. Good referencing technique will help you develop a more critical mind that will allow you to evaluate your sources more rigorously.

Get into the habit of recording all the information about a source at the time that you are taking notes from it. Don't leave it till later. The most common problems in referencing and citation are caused by losing odd scraps of paper with important information on it. Think of referencing as a critical part of your work, not something to be added on at the end.

Follow the established conventions for your field unless you can convince others that you have found a better way of doing things.

Be consistent.

Put yourself in the reader's position. Could you trace the source easily from the information provided?

Make all the entries in your bibliography consistent (see Reference List (http://www.monash.edu.au/lls/llonline/writing/information-technology/sources/2.6.xml) A bibliographic software program such as Endnote can take some of the work out of referencing, particularly if you are a postgraduate. There is an online tutorial on using Endnote at http://www.lib.monash.edu/tutorials/endnote/ Frequently Asked Questions and software downloads are also available through the Library at http://www.lib.monash.edu/endnote/

Get into the habit of using a style guide to help you with referencing, indeed to help you with many of the little style problems that come up in academic writing.

When not to Reference

1. You do not have to reference what is known as "common knowledge". This is somewhat difficult to define, as what may be common knowledge in one field will not be in another. Essentially, however, common knowledge is *what most people in a particular field would be expected to know, and which has the status of established fact*.

2. You don't need to reference is when the idea or the words are totally yours. Don't be afraid to claim your ideas as your own.

Checklist

- Have you made it as easy as possible for the reader to locate your source?
- Have you supplied all the necessary details?
- Is your referencing *consistent* and *accurate?*
- Does the referencing style you are using conform to the journal or discipline standard?
- Have you acknowledged all *words* and *ideas* that you have drawn on?
- Have you compiled a bibliography or list of references?
- Does the in-text citation point to a specific reference in the bibliography/list of references?

The Future of Referencing

The advent of the Internet has lead to new developments in referencing. For instance, in this article, you can click on the hyperlink and go straight to the source. It can cut out the middleman. But the Internet presents its own problems. Web pages change and disappear. Accepted conventions for referencing on the Internet are still in flux. The principles, though, are the same as for other sources: make it easy for the reader, be consistent, and be honest. Don't be tempted to copy texts you find on the Internet any more than you would from a paper source. Even if the lecturer does not notice the shift in style, topic, tone, etc, assignments can be checked by software which detects plagiarism.