

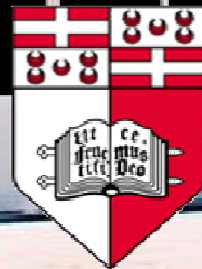
Plagiarism and Information Literacy

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Referencing (and its ramifications)

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Disclaimer

- This presentation gives my ideas and tips about 'referencing' and all the other topics I shall discuss, based on more than 30 years of publishing, refereeing, supervising students, assessing student work and examining dissertations.
- Nonetheless, these are **my ideas** and others may disagree with them.
- If you have any doubts, **consult with your advisor, mentor, supervisor** or whoever is designated by your Faculty/Department/Institute to give you advice.

An apology

- I am a scientist, specifically, a biologist. My experience is therefore in these areas and what I shall say reflects my background.
- I have tried to make this presentation as generally applicable as possible, but the bias is 'science'.
- My apologies to the non-scientists for this, but I hope you will still find something useful in what I say.

What is 'referencing'?

- The boring stuff at the end of an article, paper, report or dissertation, or dispersed as footnotes throughout the text.

What does it do?

- Provides the reader with information on the **sources** of information used in writing the work.

Note that there **IS** a difference between a 'reference list' and a 'bibliography'.

What is the difference between them?

- **Reference list** = list of literature sources actually **cited** in the work and from which information was taken.
- **Bibliography** = list of literature sources consulted in the preparation of the work but which may or may not have been cited.

Scholarly works (primary literature, monographs, dissertations, research reports) always have 'references', never a 'bibliography'.

Why cite?

- Three primary reasons:
 1. To inform the readers of the existing knowledge on which your work is based, and where your work fits in (if this is a piece of research work).
 2. To enable the readers to find and read the original sources you used if they are interested to do so.
 3. To give credit where credit is due and therefore to avoid **plagiarism**.

Other reasons:

4. In a critical review, to acknowledge who said what and to distinguish your assessment of the arguments from the arguments themselves.
5. To support your arguments or interpretations by referring to already published work.
6. To demonstrate to the reader that you have a good knowledge of the relevant literature (particularly important if your reader is an assessor).

How to cite?

- There are many different systems, and different disciplines have their own preferred mode of citation.
- However, the key aim is to enable the reader to trace the **original source** cited and read it.

If you are ever in doubt about how to give a reference, ask yourself if you would be able to find the source on the basis of the information that you will provide!

Referencing style

- At University, each Faculty/Department/Institute will have its preferred style and will issue guidelines for students.
- For example, many life science departments recommend the use of the style of presentation adopted by the **American Psychological Association** for dissertations submitted to the University of Malta through the Department.
- The **APA style** covers both standard and grey literature and all manner of other resources, and is very logical.
- It also covers websites, web pages, and other electronic media (*e.g.* online newspapers, discussion lists, CDs and DVDs, etc.).

Tip

- Once you adopt a particular style of writing references **STICK TO IT!**
- This includes use of parentheses, punctuation, upper case letters, etc.
- Mixed styles and inconsistent application give a very bad impression of the writer!

Ethics in citation

- By implication, all material in a submission is the **original work** of the authors unless they clearly state that they are **citing the work of others**.
- If the work of others is used but this is not clearly indicated, this constitutes **plagiarism** and possibly **fraud** (which may be a criminal offense).

What to cite?

- Cite the source of your information, normally, the **scholarly literature** on the subject.
- Be aware that there are different types of 'literature' and not all literature sources are 'equal'!

Types of literature

- The different **types** of scholarly literature are normally referred to as:
 - Primary
 - Secondary
 - Tertiary
 - Grey literature.
- Note that 'type' refers to the **content**, not the medium of publication.

What is 'Primary literature'?

- Refers to accounts of research carried out personally by an individual scholar or as collaboration by a group of scholars.
- Published in **peer-reviewed scholarly journals** as what are commonly referred to as '**research papers**'.

The publication process

- Papers are submitted as ‘**manuscripts**’ to the **journal editor** who first vets them to see if they are within the scope of the journal, prepared in the required format, or otherwise suitable.
- If papers pass this first vetting, the editor then asks a number of recognised experts in the area of study addressed by the paper (called ‘**referees**’) to:
 - Give an opinion on whether the work reported presents new information.
 - Report on the merits and deficiencies of the work.
- ➔ This is known as ‘**the refereeing process**’.

The publication process

- On the basis of the referees' reports, the editor may:
 - Accept the paper as it was submitted.
 - Require minor revision from the authors.
 - Require major revision (which is then refereed again).
 - Refuse the paper outright.
- This formal reviewing process is known as 'peer review'.

Each time a scholar submits a paper for publication in a quality peer-reviewed journal, that scholar's work is scrutinised minutely and critically by multiple examiners who are tasked to weed out inferior work and to point out all deficiencies without regard to who the scholar is or what position or status the scholar has.

Peer review

- The 'peer review process' is a rigorous assessment of the quality of a paper meant to maintain standards, improve performance, and provide credibility.
- Most papers actually fail peer review, at least on first submission.

Types of primary literature

- There are different types of primary journals:
 - International.
 - Regional.
 - Local.

Grading the primary literature

- There are also systems that grade the importance of journals on the basis of how often papers carried by the journal are cited in other research papers.
 - The most widely used of these is the 'Impact Factor'.

What is 'Impact factor'

- Invented in 1955 by Eugene Garfield and now operated and sold by *Thomson Scientific*.
- A **grading system** for journals, designed to identify the most important from the thousands published.
- Based on tallying the mean number of **citations** per article for each journal.

Impact factor

- 'Impact Factor' has been used as a tool to gauge academic 'worth' based on the premise that journals with a high 'Impact Factor' publish the most significant papers and therefore the scholars that publish in such journals are at the top of their field.
- Now plays a crucial role in recruitment, academic promotion, allocation of research funding and even in award of bonuses.
 - For many scholars, producing a constant output of good quality research papers published in the peer-reviewed primary literature may be critical for their career.

Problems with 'Impact factor'

- *Thomson Scientific's* 'Impact Factor' factor has been severely criticised especially since it seems to be based on hidden data not available for scrutiny and that it is ill-defined and unscientific.
- Also, *Thomson Scientific* is a 'for profit' commercial company.
- Other, better, metrics of 'impact' now exist and are being developed.

What is 'Secondary literature'?

- Consists of publications that rely on primary sources for information.
- It is not a requirement for the authors to have done the work themselves, since the purpose of the publication is to **summarise and synthesize knowledge** in a specific area for other scholars who already have an understanding of the topic.
- However, the authors of secondary publications would normally have worked and published primary literature in the area they are writing about.

Secondary literature

- The secondary literature includes:
 - Review journals.
 - Monographic books.
 - Advanced textbooks.
 - Handbooks → reference works providing specific information about a subject.
 - Manuals → provide instructions on how to do something.

Secondary literature

- Secondary publications are **fully referenced** and most of these references are to the primary literature.
- Scholars use the secondary literature to gain an overview of research areas that are close to or relevant to their own, or to familiarize themselves with existing research in new topics on which they plan to start working.

What is 'Tertiary literature'?

- Consists of published works that are based on primary or secondary sources and that are aimed at scholars who work in different areas from the subject matter of the publication, or towards an interested but lay audience.
- Are normally written in a **popular** rather than a scholarly style.
- May include a short **bibliography**, but they do not usually include references to the primary literature.

Tertiary literature

- Examples of the tertiary literature include:
 - Specialised magazines.
 - Introductory textbooks.
 - Newsletters.
 - Articles in newspapers and magazines.
 - Encyclopaedias.

Note that normally, the tertiary literature is **not** an acceptable source of information for writing scholarly reports.

What is 'Grey literature'?

- Refers to sources of scholarly information that are not published and distributed in the usual manner and which therefore may be difficult to obtain.

"That which is produced on all levels of government, academia, business and industry in print and electronic formats, but which is not controlled by commercial publishers."

Fourth International Conference on Grey Literature: New Frontiers in Grey Literature.
GreyNet, Grey Literature Network Service. Washington D.C. USA, 4-5 October 1999.

Grey literature

- Grey literature includes:
 - Dissertations.
 - Technical reports with a limited distribution.
 - Journals published by special interest groups that have a limited distribution.
 - Abstracts of conference papers.
 - Conference proceedings that are only made available to conference participants.
 - Environmental Impact Statements.
 - Some types of Government documents.
 - Working papers.
 - Pamphlets.

Grey literature

- Being classified as 'grey literature' in no way implies that the publication has little scholarly merit, since some types of grey literature are rigorously peer reviewed.
 - 'Grey' refers more to the limited distribution and difficulty of accessing the publication than to its content.

Dissertations

- **Dissertations** are formal, lengthy expositions of an original piece of research presented for the award of a university degree.
- Dissertations **are not** 'publications' and **are not** primary literature and great care should be exercised if they are going to be used as sources of information.
 - In the library, you only have access to the dissertation itself; you do not have access to its evaluation and even bad dissertations containing erroneous information make it to the shelves if they 'pass'.

Internet publications

- Information available on the **Internet** ranges from absolute rubbish to high quality.
 - There are very authoritative looking sites that present completely wrong information, sometimes deliberately.
 - There are also primary peer-reviewed scientific journals that are **published online**.
- ➔ Professional looking websites are no guarantee of quality information!

Scholarly publishing and the Internet

- The advent of the Internet has resulted in new types of scholarly publishing.
- One new type is **open-access publishing**.
 - Publishing is supported not by subscription fees but by author fees.
- Open-access journals are very good for disseminating information widely and rapidly since anybody with an internet connection can access papers and download them for free.
- However, there are also problems!

Problems of open-access publishing?

- Anybody can become a 'scholarly publisher'; all that is needed is a computer, a website, and unique journal titles.
- Authors are now the publishers' customers, which can create a conflict of interest since the more papers a publisher accepts, the more revenue it earns. Therefore quality may be compromised.
 - Acceptance rates by some open-access journals are very high, article peer review is minimal, and hundreds of new, second- or third-rate articles are published each year.
 - Overburden serious researchers who have to sort out the good from the bad, and confuse students!

So, can I use the internet?

- The Internet can be a useful source of scholarly information...

BUT

...one needs to be **very careful!**

- At best, you can waste a lot of time.
- At worse, you can get completely wrong information.
- ‘**Cut and paste**’ and ‘**Download**’ functions give great scope for plagiarism.
- As with all other tools, maximum benefit can be derived if you learn how it works and how to use it.

The key?

- **Evaluate your sources!**
 - Evaluating the **quality** of scholarly information requires the same skills regardless of whether the information is in hardcopy, or on the Internet, or in some other format.
 - However, critical evaluation is especially important when using the **Internet** because of its wide use, the diversity of sources, and its unregulated nature.
- Unlike most traditional sources of information, there is no authority that approves content before it is published on the internet.

Final messages

- Always give your sources (it's in your interest for many reasons).
- Do so in the way that you have been instructed.
- Be methodical and systematic.
- Know the difference between the different types of literature.
- Give preference to primary sources.
- Use the internet, but be very, very careful.
- Evaluate the quality of your sources (find out about indicators of quality).

Thank you for listening!