

Academic Writing handbook

Guidance for students 2017-18

Introduction

As a postgraduate institution, LSHTM expects all students to demonstrate a high standard of academic practice in work done for School programmes. This handbook gives general guidance about how to write in the 'academic style' the School expects. It should be applicable for students at all levels (MSc, Diploma, Certificate, short course, or even Research Degrees), whether studying in London or by distance learning.

This supplements basic guidance you will have been given in your programme handbook or other similar documents (e.g. project handbook, research degrees handbook). Please take some time to read the information here, especially if you are not already familiar with concepts like how to reference and avoid plagiarism, or if you have not studied in a UK higher education institution before. Developing your understanding and making use of the guidance can potentially help you attain better grades.

The handbook should be particularly useful for those writing extended pieces of work, e.g. projects, although the basic principles should apply to <u>all</u> writing completed as part of your studies. It is structured with specific sub-sections you can 'dip into' and refer back to if you need guidance on something specific.

- Chapter 1 covers some basic information about how to structure your written work, the standard of English expected, etc. However this chapter does not go into great detail, but instead gives links to further useful resources.
- Chapter 2 to Chapter 4 give more extensive guidance on what is perhaps
 the most important element of good academic writing learning to cite,
 reference and acknowledge your sources, so as to avoid the risks of
 plagiarism or other irregularities. Further useful links are also given; but
 what is here represents the School's policies on these matters.
- Chapter 5 gives some information about copyright.

In the event of any inconsistency between the information in this handbook and any other School document, please contact your Programme Director (taught programmes) or Faculty Research Degrees Director. Where an interpretation may be required, advice should be sought from the Associate Dean of Studies.

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Chapter 1: Writing skills

The ability to produce good-quality written work is a key aspect of obtaining your degree, and also likely to be very important in your subsequent professional life. This chapter offers some brief guidance on 'general' writing skills – how to organise your ideas and present your work well. Links to more comprehensive guidance and resources have been provided.

If you have not done a great deal of academic writing in English recently, then as preparation for formal assessments you may find it helpful to practice turning your study notes into 'exam-style' answers or 'essay-style' paragraphs and sections. You may be able to ask someone appropriate (such as a tutor) to comment on whether such material meets the standards required for assessments.

A. General guidance for academic writing

The style of writing required for LSHTM assessments may call for different skills to those you have used in your previous education or employment. If you are not entirely confident in this, remember that the more academic writing you do, the better you will become at it. Aspects that may be new or unfamiliar, such as citing and referencing, should become much easier when you have had the chance to practice applying them in different assessments. Staff may also give you comments or feedback about your writing style, and help you to identify whether there are any aspects you can improve.

The following guidance is intended to help with all forms of writing. It is mainly drawn from guidance about producing essays or reports that are a few thousand words long. However, these ideas may be applied for shorter work including reports or for assignments of less than a thousand words.

A.1. Reviewing the literature

Your first step should normally be to gather together all your existing knowledge about the topic(s) you need to address, e.g. by checking back through lecture notes, and identifying the areas where you need to learn more. Depending on the requirements of the work or assessment, it may be necessary to carry out a thorough literature review; Library & Archives Service staff will provide more help and guidance about how to do this most effectively. Even if you are not required to do a formal literature review, it will usually be helpful to prepare a list

of all the key academic literature on the subject, which you can update as you work through your reading and writing for the assignment. Putting key details into a 'reference manager' programme (e.g. EndNote, Mendeley or Zotero) can help make things easier for later on – guidance about this is given in Chapter 2.

Using reference sources

Publications such as encyclopaedias and dictionaries (including online sources such as Wikipedia) are secondary sources. They may be helpful research tools, useful as starting points to help scope the general area you are covering. They may identify some academically reliable information and direct you towards more authoritative primary sources.

However, secondary sources should <u>not</u> be a final source of facts that your work depends on – so you should not normally cite or reference from them. You should have a good reason if you wish to use them instead of a primary source; for example, if you want to quote the dictionary definition of a particular term, or if you are working in conditions with very limited library or journal access (if so, please acknowledge this using a note with your reference list).

Wikipedia and similar online resources are <u>not</u> considered a reliable source of information for academic work, and you should <u>never</u> cite them in any work at the School. No professionals in any School discipline would ever normally cite Wikipedia or other such sites when writing a journal article, government document or similar. You are expected to uphold the same standards in your work as a postgraduate School student.

This does not mean you cannot make use of such resources; they may still be helpful research tools to point you towards authoritative primary sources. However, you should treat Wikipedia and similar websites with caution, and always verify anything you find using primary or reliable sources.

A.2. Considering the topic and examining the question

As well as reviewing the literature, before you start writing it is always useful to spend some time thinking carefully about the topic. If there is a specific question you have been asked to answer, can you break it down into a set of smaller and more specific questions? If you are required to choose your own topic, what are your options? The further resources in section B consider some of the many different techniques which exist for brainstorming and generating thoughts and ideas – e.g. about how problem X affects issue Y, and what follows from this. Do whatever works best for you; but as an end result, you should aim to come

up with a clear idea of the scope, parameters and dimensions of what you will cover.

Another useful approach is to consider what kind of perpective or lens you can use to look at the topic. What theories or evidence does the literature provide? What different groups of people are affected by the subject under discussion? What arenas does this issue affect (e.g. social or economic impacts)? What factors underpin it (e.g. physical or biological variables)? What components is the issue made up of? What tensions or challenges does it create? Can you give some case studies? You may wish to think about commenting on and critiquing some, not all, of the different approaches that may be taken to answering the question.

It is important to always **answer the question** or ensure you fully address the subject your title indicates. Examine the question carefully to identify any subquestions and consider exactly what is being asked in order for you to address it explicitly.

It is usually helpful (especially with word count constraints) to strategically **select specific issues** you will deal with – rather than attempting to deal with absolutely everything that may be of relevance. One way to do this is to briefly list all major issues that may apply, then state which subset of these you will consider in depth.

Look at the question from different angles; and where appropriate, try to use a **mix of theory/literature and practice/personal** elements – i.e. integrating academic context (from your reading) and particular case material. It is often useful to present examples as structured case studies (with comparable information and evidence) – this can help support your argument much more strongly than scattering different unrelated examples throughout the text.

Apply **criticality** – don't simply quote or describe the work of others; show how they differ, take a position and examine pros and cons, be sceptical. If appropriate, use a variety of perspectives and theoretical frameworks/concepts.

Aim to demonstrate **excellence** through comprehensive engagement with and understanding of the topic, insightful analysis that leads to a compelling argument, and demonstrating original or independent thinking (for example, adapting an existing model from the literature to work in a new way).

A.3. Planning

A good piece of academic writing should always be well-structured – being clear, consistent, relevant and readable all the way through, to support an authoritative conclusion. The best way to achieve this is by planning your structure and arguments in advance.

You may feel that simply writing or typing away in a stream of consciousness is a technique that proves effective for you. However, you will need to edit and adjust the structure for clarity of understanding so be prepared to come up with a first draft which you then aim to improve.

Having identified all the main aspects of the topic that you want to cover, you should develop a structure. Typically, each point you wish to make will correspond to a paragraph or two in the final work. Ideally, all your points should flow in a logical sequence from one to another, to create a coherent proposition or argument. Everything you include should be relevant to the question or title of the work, and create a consistent answer or treatment of it. You may need to discard certain points or ideas that don't fit with this plan, or refine them so that they are relevant to include.

You should also be aware that while the guidance here is generic, certain programmes or assessments will have much more specific requirements for how your work should be written up and structured. In some cases this may mean a requirement to follow established public standards – for example if you are working in an epidemiological area, you may be required to follow the CONSORT and STROBE guidelines for reporting of clinical trials and observational studies. Please check the assessment requirements you have been given (especially the project handbook for any MSc students doing a project) to see what may apply in each case.

A.4. Major structural elements

The kind of written work you may need to produce as a School student may be greatly varied – but invariably, everything you write will need to have a beginning, a middle and an end. For anything at essay length or longer, this will normally correspond to an introduction, main content, and a conclusion.

The **introduction** should set out for the reader the topic that you are going to cover. It should normally include a brief interpretation of the title or question (including defining any key terms) – i.e. what the issue is, and why it is important. It should set the scene briefly, mentioning any key contextual issues

relevant to the topic). It should make clear how the assignment/essay/report will be structured, so as to address the title or question. This signposting is an important first step and will give the reader a clear indication of your academic voice and interpretation of the topic to be considered.

The **main content** of your work is obviously very much dependent on whatever topic you are addressing.

- If you are describing a scientific experiment, the 'Methods–Results– Analysis–Discussion' approach is standard and may be encouraged in the assessment criteria.
- If you are writing a more discursive essay, it is often useful to use an 'argument-interrogation-integration approach', i.e. taking a specific issue from the data or idea from the literature, establishing the context and identifying the main issues or problems, examining and critiquing strengths or weaknesses (giving practical case examples is often helpful), and making a judgement about it.

Generally, it is good to give ideas from both theory (literature) and practice (evidence from you or from others). It is also generally helpful to set out specific strategies or recommendations for how to address any problems you have identified. And unless discouraged in the assessment criteria, it is generally good to include some personal views about the issues, e.g. reflecting on examples from your own experiences, or critiquing aspects of the literature. However, note that personal opinions should always be clearly labelled as such, and should not dominate a piece of academic work.

The **conclusion** should summarise everything you have set out in the main body of the work, recapping arguments/findings/recommendations you identified earlier in the main content. As a general rule, you should avoid introducing any new material in your conclusion. You should reflect on the argument, variables or critical factors, and the implications of the issues raised. The conclusion should pair up with and reflect the introduction – to form a coherent whole that supports the main content.

A.5. Presentation

The way you present your work may have a limited, but important, effect on the mark it receives. Some key rules to bear in mind are:

• Follow the exact presentation or formatting criteria are laid out in the assessment guidelines – e.g. font size, line spacing, margins etc.

- Present your work so it demonstrates the underlying structure, e.g. with headings and subheadings to distinguish different sections.
- Be consistent in the formatting style you apply e.g. using the same font and font size throughout the main part of your work; or standardising your use of different formats (bold, underlining etc.) to distinguish headings and subheadings.
- Paragraphs should be short-to-medium-sized and uncluttered. Ensure you
 put a line break after each paragraph, to make them more visually distinct.
- Reinforce the narrative flow of your work and the power of your argument, by using visual elements (e.g. tables, diagrams, charts) and signposting (e.g. headings, recaps and summaries) throughout .Use of bullet-pointed or numbered lists may be helpful.

A.6. Language skills and standards

The School is proud to have a very diverse student body, including many whose native tongue is not English, or others returning to study from a job which did not required regular academic-style writing.

If English is not your first language or you are not fully confident in your fluency, please be reassured that a perfect standard of written English is not a general requirement for assessed work. Rather, School assessments will normally ask you to produce readable and evidence-based commentary or analysis that puts your points across clearly. Your use of language needs to demonstrate your knowledge of the topic, not your fluency in English, so you should not be marked down for minor imperfections.

However, all School programmes are English-language-based, and all students are expected to have a standard of written English sufficient to demonstrate their academic competence. If you are worried about your level of English, you may wish to take some additional language training, separate to your School programme – the British Council, www.britishcouncil.org, are a good source of information on English courses available in different countries around the world. Students studying in London can also attend a free programme of 'English for Academic Purposes' workshops.

While this handbook cannot possibly cover all the ways you might want to use English in your writing, the following points may be useful to bear in mind:

- Always remember that the objective of a piece of academic writing should be to produce something readable and evidence-based that puts your points across clearly.
- Aim to use straightforward clear phrasing, you should choose words because they are clear and precise and convey exactly the meaning you intend, not because they sound complex and clever.
- Sentences should be no more than two or three lines long at the most any longer sentences are probably too long and should be broken down.
- Try to ensure your spelling, grammar and punctuation are correct. Using correct English is a key part of being able to communicate ideas and demonstrate your knowledge, as well as a courtesy to the reader to make your work as readable as possible.
- Choose to write in a specific 'voice', and do this consistently.
- When you have finished writing a draft of your work and are reasonably happy with it, you may ask someone else (for example, a native speaker of English) to proof-read it. They may then make suggestions about your use of language, grammar, etc.
- Always proof-read your work (yourself) before submission.

A.7. Developing independent and critical thinking

All School assessments will require you to demonstrate knowledge of the basic facts in the area under discussion – by making use of the literature, and citing the work of relevant authorities. Over and above this, at postgraduate level you are expected to demonstrate evidence of independent critical thought and real understanding. As well as summaries of what other researchers have found, you should give details of what you think of their findings and their interpretations. Your point of view should come across to the reader as a justified judgement or reasoned argument, and not simply as an opinion.

As outlined in Chapter 2, it is vital that the work of others is cited or acknowledged appropriately wherever you make use of it – otherwise you run the risk of plagiarising. The references you use should demonstrate your reading and learning.

Conversely, you should be aware that over-reliance on referencing is liable to attract a lower mark. While a correctly-presented reference is never in itself a bad thing, it would be seen as excessive for a piece of work to consist almost entirely of referenced quotations or paraphrasing of the work of others. Work that demonstrates a lack of original argument or analysis, or understanding and

engagement with the topic, is liable to fail – so you need to give your own comments about any work you are citing.

You should also avoid learning information by 'rote'. Rote learning involves memorising extracts of text or information, often for the purpose of recalling and reproducing the material in answering an examination question. Students that do so risk failing to acknowledge the source or author correctly and may therefore commit plagiarism. School assessments are designed to test your understanding and application of knowledge, not simply to test of your capacity to reproduce large extracts of information or text.

To obtain high marks, you will almost always be expected to:

- Examine a particular body of knowledge which may be your own research, or the work and ideas of others, or a combination of the two.
- Demonstrate your understanding of this knowledge beyond simply stating facts or repeating information from textbooks or other sources, you should show that you have learnt and can apply the concepts and skills involved.
- Critically examine and challenge such knowledge give your own views and analysis, and aim to identify both strengths and weaknesses (whether in your own research or in the work of others).

When putting forward the viewpoints of others, it may be useful to consideryour own opinions or alternative thoughts. As you write, ask yourself "How does this demonstrate critical thinking?", and "How does this demonstrate independent thought?" You may be able to give examples to show that you understand the concepts, or to compare and contrast different facts or ideas to show that you have thought critically about them.

B. Further resources for developing your writing skills

All students, no matter how experienced or fluent in producing written work, will benefit from reflecting on how you approach the 'skill' of writing for academic purposes. The Library has a wide range of books that provide guidance and support for academic writing and study skills, shelved under the classmarks AH.AZ and AR.AT. Most such books also tend to be reasonably priced and commonly available from bookshops catering to students and academics. Those listed below are available to borrow in the Library. You should find at least some of the following selection of books and online resources helpful.

B.1. Overall tips on writing theses and dissertations

Recommended

- http://owl.english.purdue.edu/owl/ from Purdue University Online Writing Lab, USA an extensive set of resources on good writing practice. Click on the 'General Writing' link for guidance that is likely to be helpful in writing assignments and essays.
- Swetnam, D. (2004) Writing your dissertation. 3rd ed. How To Books, Oxford.

Also potentially helpful

- http://writing.yalecollege.yale.edu/advice-students/what-good-writers-know
 from Yale University. A good summary of principles for writing well, included as part of the wider suite of resources from the Yale Writing Center.
- www.hamilton.edu/academics/centers/writing/writing-resources—from Hamilton College, USA. Useful tips on using sources, with guidance on citing and paraphrasing.
- Murray, R. (2007). *How to Write A Thesis.* 2nd ed. Open University Press, Maidenhead.
- Winstanley, C. (2009). Writing a Dissertation for Dummies. John Wiley & Sons Ltd, Chichester.
- Wallace, M. & Wray, A. (2016) Critical Reading and Writing for Postgraduates. 3rd ed. Sage, Los Angeles.

B.2. More information on good writing practice

Recommended

- www.open.edu/openlearn/education/essay-and-report-writing-skills/contentsection-0 - from the Open University. A comprehensive set of introductorylevel online tutorials about planning, structuring and writing academic assignments or reports.
- Bailey, S. (2006) Academic writing: a handbook for international students.
 2nd ed. Routledge, London.

Also potentially helpful:

• <u>www.umuc.edu/writingcenter/onlineguide/chapter5-01.cfm</u> – from University of Maryland University College, USA. This has in-depth guidance on all

aspects of documenting sources, as part of a chapter from an online book about academic writing. Other chapters of the book cover many further aspects of effective writing, and may also be helpful.

- Craswell, G. (2005). Writing for Academic Success. Sage, London.
- Murray, R. and Moore, S. (2010). *The Handbook of Academic Writing A Fresh Approach.* Open University Press / McGraw Hill, Oxford.
- Goodson, P. (2013). Becoming an academic writer. Sage, Los Angeles.

B.3. Style guide for medical journal articles

Recommended

www.bmj.com/about-bmj/resources-authors/house-style - from the British Medical Journal. These are the BMJ's official instructions for authors on the 'house style' to use in submitted papers. These include many helpful tips for good writing in general, e.g. grammar and punctuation, as well as more specific guidance on exactly what the BMJ will accept. This can be seen as a 'gold standard' of how you should aim to put a paper together for medical topics.

B.4. Other relevant study skills resources

Recommended

 https://lshtm.sharepoint.com/Teaching-and-Support/Pages/study-skillslinks.aspx the School's own study skills page, with links to many further useful study resources from other academic institutions. As well as the writing skills links given above, this covers areas like research skills, using the internet and searching databases, as well as maths and numeracy, memory skills, time management, groupwork, presentation skills, etc.

Also potentially helpful

- www.britishcouncil.org the British Council, a good source of information on English language training/courses available in different countries around the world.
- Burnapp, D. (2009). Getting Ahead as an International Student. Open University Press, Maidenhead.
- Cottrell, S. (2003). The Study Skills Handbook. Palgrave, Basingstoke.

Chapter 2: Citing and referencing

Academic writing, particularly when it is formally assessed, has to follow rules and conventions. Among the most important of these are rules and conventions about citing and referencing the work of others. These help distinguish academic material from other forms of writing.

Scholars and researchers should always clearly state which ideas and work are their own and which are other people's – by citing and referencing correctly. This chapter sets out the School's standard guidance on how to do this, and should apply for all work you do in the course of your School studies. Additionally, certain modules or programmes may have more specific requirements and will make these clear if so.

The School's key requirements are that your written work should always:

- 1. Acknowledge the work of others wherever you make use of it.
- 2. Present such acknowledgements in a consistent way using a recognised citation system.
- 3. Give a well-presented reference list at the end of your work.

You are also encouraged to make use of reference manager software, particularly for extended pieces of work with many references. Such software allows you to manage citations and reference lists in your work more easily and more consistently than doing so 'manually'. The package supported by the School is EndNote and guidance is available for using this; further details are given in section E. Mendeley, Zotero and RefMe are free, cloud-based apps which are designed to do a similar job to EndNote.

A. Principles of citing and referencing

A citation or reference is a way of properly acknowledging where you make use of the work of others. "Citing" means giving such an acknowledgement within the main body of a piece of work, while "referencing" is a broader term which covers both in-text citations and the more extensive information about your source material which should be presented at the end of your work. As well as allowing any of your readers to consult your references, this also gives authority to your work by demonstrating the breadth of your research.

You must always clearly identify <u>any</u> and <u>all</u> directly copied quotations (such as sentences, phrases or even striking expressions), by placing them inside

quotation marks, followed by a clear citation. You must equally clearly indicate where you have paraphrased or summarised another person's words, ideas or judgments – by referring to that person in your text (e.g. by giving a reference in a bracket after the paraphrasing, or in a footnote) and including the work referred to in your reference list.

Sources can include (but are not limited to):

- published works such as journal articles or books (including any textbooks set by the programme or module – even if markers will know exactly where something comes from, you must still state it clearly);
- literature such as conference proceedings or reports from organisations and government agencies;
- material from the internet, whether or not it has a named author;
- unpublished material such as lecture/tutorial notes or other students' work;
- exchanges such as emails or conversations with other people (be they staff, students, friends or others).

Your reference list or bibliography should list sufficient details of each of your cited sources to ensure your reader can consult the exact source you refer to. Therefore, care must be taken to record this information when you initially read it, particularly if it is published online. Online information can radically change without warning so the date of access is usually added to the reference. Details of what information to record for each reference type is provided in **Error!** R eference source not found.

You should always use a recognised citation system or style for your references. This will determine how you present references in the main body of your work, and how you present the reference list at the end. There are a large number of recognised systems; the two most widely used in medicine and science are known as Harvard (the author/date style) and Vancouver (numbering style). Both are described more fully in this guidance. Whichever system you adopt should be used consistently throughout your piece of work – never 'mix and match' different referencing styles.

The body of your work should make clear which pieces of information have come from your own research and which have come from the work of others. As well as citing and referencing sources, you should also acknowledge any further assistance you have received in preparing your work. Further guidance is given in Chapter 4 on recognising the contribution of others.

The guidance on referencing used throughout this document comes from two sources:

- Harvard: Guide produced by Monash University Library, Australia (http://guides.lib.monash.edu/citing-referencing/harvard)
- Vancouver: Guide produced by the National Library of Medicine in the USA (www.nlm.nih.gov/citingmedicine/).

You should follow this guidance if you are manually adding references to your documents. If you are using reference management software, it is unlikely that you will find a style which matches the punctuation in these guidelines exactly. Choose a style ensuring that your reference list is formatted to include sufficient details of your sources for your reader to easily consult them, while still conforming to the guidelines required by your programme of study or module.

A.1. Which referencing style to use

There are many other well-recognised citation systems in addition to Harvard and Vancouver. Specific modules or programmes may teach you particular advanced approaches or prescribe certain writing styles that meet the conventions of the field you are working in. Otherwise, it will normally be up to you to decide which system you would like to use.

It may be helpful to note -

- The Harvard system can be easier to use during word processing, since the
 insertion of an extra reference does not require the renumbering of all
 subsequent references (as it can with the Vancouver system). This tends to
 be a good system to use for discursive essay-type work, or in fields like
 social science.
- The Vancouver system may aid clarity and readability where the same item
 is cited many times, since you just need to give the same numeric reference
 in each case rather than cluttering up your work with repetitions of the same
 author-and-date details. This tends to be a good system to use for more
 technical work, e.g. in relation to lab-based experiments, or in medical
 writing.
- Other alternative styles of referencing may also be recommended for a specific piece of work. For example, footnotes-based styles such as the Chicago style, MHRA, or the Turabian system are commonly used for presenting research in historical fields such as history of public health.

It's also useful to be aware that academic journals provide instructions to authors (which are usually accessible via their websites) to describe the specific 'house style' they use for references. For example, the journal Cell describes

the use of the Harvard system, while both the British Medical Journal (BMJ) and the Lancet use variations of the Vancouver system.

Remember that whichever referencing style you use will have its own requirements for both presenting a citation in the main body of your text (the data and format required), and presenting the reference list at the end (the data, order and format required). These requirements will also vary depending on the type of source, e.g. journal articles, books or websites may all require slightly different information to be given in the reference list.

B. Citing a source in the body of your text

You should always give a formal citation at the first point you make use of a source. The citation is likely to go at the end of a sentence that mentions an idea, or after a quote. If you then carry on discussing material from that source or giving further quotations, you *don't* need to repeat the citation at the end of every sentence or quote, provided that you don't make use of any other sources in that discussion, and that you present it in a way that makes clear to the reader that this is all based on the same source.

One way of making the source clear without repeating the full citation is to use the Latin term 'ibid', meaning 'the same place'. For example:

'Community workers cannot provide comprehensive care for all community health needs' (Haines et al 2007, p.167). However, 'they can have an important role in increasing coverage of essential interventions for child survival' (ibid).

B.1. When to provide page numbers

Page numbers should be added to your citations whenever you cite a direct quote or a specific element from a long document. This is to help readers to find the element you mention if they go to look up the source. It also allows you to include a book just once in the reference list, but cite different specific pages or sections at various points in your work. To explain further:

Sources like journal articles, conference papers and short reports don't
necessarily need a page reference and can be presented in the standard
form, such as "(Abrams 1969)". Someone looking up the source, from the
detailed information you give in the reference list at the end, could
reasonably be expected to find the specific element you mention. However,

- if giving a direct quote from the text or reproducing a table or figure you should also give the page number.
- For lengthier sources like books, PhD theses or long reports, if you are specifically giving a quote or referring to an idea on particular pages, then you should always specify the page(s) involved. The reference can either be to a single page e.g. "Using Bushaway's (2003, p.142) definition of research management"; or to a range of pages, for which you should give the start and end pages separated by a dash for instance "International views on effective public policies for health (WHO 2008, pp. 64-65)".
- However, if you are referring to an idea or body of knowledge represented by the *entirety* of a long-form source like a book, you do not need to give page numbers. The context in which you present the citation should make this clear, for instance "applying the concept of human capital put forward by Becker (1994)".
- The above examples are cited in the Harvard style, but exactly the same principles apply in Vancouver and most other styles. For example, "Using Bushaway's definition of research management^{1 p.142}"; or "International views on effective public policies for health (2 pp.64-5)".

B.2. Distinguishing citations from your own notes

You should be careful to clearly distinguish citations, i.e. mentions of other people's work, from further explanations of your own work such as spelling out abbreviations, giving details of complicated units of measurement like 'number of infant deaths per 1000 live births and stillbirths', or making reference to additional details you have put in a footnote, endnote or appendix.

- In most cases this should be straightforward e.g. a Harvard-style citation (author/date) in brackets should be obviously different to an internal reference or note (such as "viz. Table B" or "please see Annex 2") in brackets.
- However this has the potential to be more confusing if you are using a number-based referencing system such as Vancouver or Footnotes, and you want to indicate your 'further explanation' in a similar way. The ICMJE (www.icmje.org/) recommend you use the following symbols in sequence:
 *, †, ‡, §, ||, ¶, **, ††, ‡‡, §§, |||, ¶¶, etc.

It can also be helpful to give a glossary of terms or a list of abbreviations used in a specific section towards the end of your work.

B.3. The Harvard referencing style (author/date):

- The author's surname and year of publication should be quoted in the text, e.g. "as confirmed by Abrams (1969)" or "as confirmed by another study (Abrams 1969)".
 - If citing different authors with the same surname then distinguish them by adding their first name, e.g. "(Clive Bond 1993)" versus "(Julia Bond 1997)".
 - If there are two or three authors then all should be named, e.g.
 "(Sewell & Foster 1976)" or "(Bond, Norrish & Burton 1994)". Authors'
 names should always be listed in the same order as they are credited
 in the original.
 - If there are more than three authors, then use the first author's name followed by 'et al.', e.g. "(Gillespie et al. 1983)".
- There should be no additional punctuation between the author's name and the date (i.e. no additional full stops, commas, hyphens or colons). If the author's name is already clearly indicated in that piece of text, then only the date needs to be entered as a citation, e.g. 'Beral's findings on links between ovarian cancer and HRT (2007) suggest that...'
- You may need to distinguish works from the same author(s) that date from
 the same year. This should be done by adding different lower-case letters
 (in alphabetical order) after the year. For example, if you are making use of
 two World Health Organisation reports from 2008, you should cite them as
 (WHO 2008a) and (WHO 2008b) with the "a" and "b" versions also being
 clearly distinguished in the reference list.
- Note that when citing an edited book whose contributors are not the same as its editor, your in-text citation should add the word 'ed.' after the editor's name, e.g. "Black (ed. 1998) confirms" or "(Black ed. 1998)".
- You do not normally have to include page numbers in your text or reference list. However, if you are including a direct quote or a specific piece of information which would otherwise be difficult to find in the source, a page number should be included. Examples might include a statistic obtained from a book where its location cannot be inferred from the section title or author comments which are not directly related to the main topic of discussion. Enter the page number after the date eg (Beral 2007, p.5).
- Multiple citations should be separated by a semicolon, e.g. "Societal transitions in Eastern Europe have been described as a risk environment linked to increased mortality through alcohol use and HIV infection through injecting drug use (Bobak and Marmot 1996; Leon et al. 1997; 2007; McKee

- 2002; Rhodes and Simić 2005; Rhodes et al. 1999; Walberg et al. 1998)." These should be listed in alphabetical and chronological order.
- When citing a report or other publication which has no specific authors because it has been written by an organisation (such as a government publication, NGO report or similar), then your in-text citation should use the name of the organisation in place of an author e.g. (CSIRO 1996). Anonymous works not originating from a specific organisation are referred to by their title in parentheses e.g. (A history of Greece 1994).
- The guide produced by Monash University Library, Australia (http://guides.lib.monash.edu/citing-referencing/harvard) also provides multiple examples.

B.4. The Vancouver referencing style (numbering)

- Each citation should be numbered sequentially in the text, either in brackets, e.g. "as confirmed by Abrams (3)", "as confirmed by other studies (3)" or as a superscript, e.g. "as confirmed by Abrams.3".
- The first citation is given number 1, the second citation number 2, etc. Each citation is given the same number throughout the text so if you wish to cite the first citation again at a later point, it is still given the number 1.
 - The placement of the citation numbers within the text should be carefully considered, for example, a particular reference may only be relevant to part of a sentence. As a general rule, reference numbers should be put outside full stops and commas and inside colons and semi-colons.
- You do not normally have to include page numbers in your text or reference list. However, if you are including a direct quote or a specific piece of information which would otherwise be difficult to find in the source, a page number should be included. Examples might include a statistic obtained from a book where its location cannot be inferred from the section title or author comments which are not directly related to the main topic of discussion. Enter the page number after the reference number (3; p. 65).

C. Creating a reference list

Your reference list should include details of **all** sources cited in your work. How your reference list is formatted depends both on the citation style you are using and the type of source you are referencing. In all cases you will have to provide

enough information to allow your reader to consult the original source material if they wish to do so.

You should also note that the term 'reference list' is often used interchangeably with 'bibliography', but has a slightly different meaning.

- A reference list (or 'works cited' list) should only include items you have referenced in your work, even if you read other sources while researching the topic.
- A bibliography should cover all sources you consulted in preparing your
 work, even if you did not end up making use of them; or sometimes, a
 bibliography may be presented as a comprehensive annotated list of further
 reading on a topic. However, you should always distinguish works you have
 actually made use of from any others you are simply listing.
- In longer works, such as academic books, a 'works cited' list may be given to cover references in the text, followed by a bibliography of recommended reading.

For the purpose of School assessments, you should normally provide a reference list unless the assignment criteria specifically request a bibliography.

C.1. Presenting the reference list in Harvard style

The reference list or bibliography should be arranged by alphabetical order of the first author's name – an example (for a journal article) would be:

Ganapati, R, Naik, SS, Acharekar, MY & Pade, SS 2011, 'Leprosy endemicity in Bombay: an assessment through surveys of municipal schools', *Leprosy Review*, vol. 47, no. 2, pp. 127-131.

Comprehensive details of how to construct references in the Harvard style are given in **Error! Reference source not found.**. The guide produced by Monash U niversity Library, Australia (http://guides.lib.monash.edu/citing-referencing/harvard) also provides multiple examples.

C.2. Presenting the reference list in Vancouver style

The reference list or bibliography should list the references in numerical order, i.e. the order in which they appear in the text – an example (for a journal article) would be:

2. Ganapati R, Naik SS, Acharekar MY, Pade SS. Leprosy endemicity in Bombay: an assessment through surveys of municipal schools. Lepr Rev. 2011;47(2);127-31.

Comprehensive details of how to use the Vancouver style are given in **Error! R eference source not found.** and the Vancouver Guide produced by the National Library of Medicine in the USA (www.nlm.nih.gov/citingmedicine/) provides multiple examples.

D. Citing sources in altered contexts

D.1. Self-citation

If you are submitting something that builds on work you previously did for another purpose – e.g. a published article, an essay for a programme previously undertaken at another institution, or a piece of research carried out as part of your employment – you should reference this as carefully as any other source. Similarly, if you want to re-use work you first did for a previous School assessment (e.g. to use elements of a module assignment in an MSc project report), this needs to be made very clear – as credit can only be given once for a particular piece of work.

This is known as self-citation. Professional academics and researchers often 'self-cite', and indeed it can be considered good academic practice. Doing this as a student may even benefit your grades, by demonstrating to markers the extent of your work on and knowledge about the subject over a period of time.

However, be aware that if you fail to reference or acknowledge your own further work (i.e. anything originally done for other purposes) as clearly as the work of others, then this may be treated as a form of plagiarism (see Chapter 3). Even if you own the copyright to the original work, you still have a responsibility to refer to it correctly.

As an example of self-citation: A 2009 paper by Rhodes ('Risk environments and drug harms', *International Journal of Drug Policy*, vol. 20, pp. 193-201) begins with the following sentence referring to his own previous work on the topic: "Drug harms are shaped by risk environments (Rhodes, 2002)."

D.2. Indirect citation, and secondary sources

Indirect citation means making use of a source you have not directly seen yourself, but only seen referenced in some other source (the 'secondary source'). This is strongly discouraged – it is best to look up the original versions of any primary sources you identify via secondary sources, and confirm their validity before making any use of them. Over-reliance on secondary sources is seen as poor academic practice, and unlikely to achieve a high mark.

However, in circumstances where you have very limited library or journal access or the primary source is difficult to track down (as is often the case where you want to use a quote from a historical figure), it may be acceptable to cite a secondary source *provided you clearly label the provenance of your information*. Always give a direct quote from what is written in the secondary source, rather than paraphrasing it, so as to avoid distortion; and use the terms "quoted in" or "cited in" to show how the secondary source refers to the primary source.

- An example of how to cite a quote from a secondary source in your text:
 'The proper function of a university is the imaginative acquisition of knowledge' (Whitehead 1929, quoted in Ramsden 2003)
- An example of how to present a secondary source in your reference list:
 Trost, J 1986, 'What holds marriage together?', in J Veevers (ed.),
 Continuity and Change in Marriage and Family, Holt, Rinehart and
 Winston, Toronto, quoted in Beaujot, R 2000, Earning and Caring in Canadian Families, Broadview Press, Peterborough, ON, p. 110.

You should <u>not</u> paraphrase ideas from any source that you have not actually seen in a primary form, unless it is absolutely necessary to do so and you make absolutely clear that you have drawn this from a secondary source.

D.3. Common knowledge that does not need to be referenced

For well-established and commonly-known facts ('general knowledge') which you can be confident a reader will already be aware of and understand, you should not usually need to provide a reference. Any such facts should invariably be ones you can write down in confidence without referring to anything else, which you can expect your readers to know, and which would also be easily checkable if desired – for example, that Paris is the capital of France.

Similarly, if you are writing for a specialist readership (e.g. submitting a piece of work to a scientific journal or for assessment by experts in your subject field)

then you may not need to reference well-established scientific facts, terms, methods or procedures within that field.

However, if in any doubt as to whether a specific term can be held to be 'common knowledge' for the field, please err on the side of caution and give a reference. For example, in the field of microbiology, if mentioning by name a standard laboratory technique for cultivation and isolation of bacteria, then you should not normally need to provide a reference for it; but if you have used a slightly more obscure technique which might not be known to all readers, then you should give further details.

Any points which are fundamental to the content of your work should be more fully referenced, even if they are generally held to be common knowledge. For example, 'smoking causes cancer' is now a fairly universally known and accepted scientific fact. In a paper about alcohol control you could mention this as an aside, e.g. to illustrate a point about the potential negative effects of alcohol, without giving a reference. However if your paper was on the specific effects of smoking, you ought to refer to basic primary research supporting the statement 'smoking causes cancer'.

As a general rule that applies to everything you write, not just matters of common knowledge – **if in doubt, cite**. Each time you write about an idea, take a phrase or use a definition from something you have read or heard (e.g. a document, information from the internet, or a personal communication), you should give a clear reference to the original source.

D.4. 'Off-topic' references

Even if an item you quote or reproduce is not of direct academic relevance to the topic, you still need to acknowledge it appropriately. For example, you might wish to add some 'local colour' by including a poem by a well-known national poet in the preface to a project about nutrition in India, or by including a stock photograph of spectacular scenery on the cover of a project about fieldwork in South America.

In such cases you should give a clear note about the provenance of what you have included. You should not assume that your readers will recognise a particular quote, or immediately understand that an image was not created by you. However, you do not need to include 'off-topic' references like this (i.e. items which do not contribute to the academic content of your work) in the reference list, provided they have been referenced in full within the main body of your work.

D.5. Referencing tables and figures

Your work may potentially include photographs, diagrams or graphs etc. (known as 'figures'), or tables of data or text, that are the work of others. These must have their provenance clearly indicated through a citation and reference.

All figures and tables should be captioned and must be referred to in the main body of your text. Figure captions appear below the figure and are numbered sequentially (e.g. Figure 1, Figure 2). Table captions appear above the table and are also numbered sequentially (e.g. Table 1, Table 2). The captions should include a brief statement of what is included in the figure or table, together with definitions for any symbols or acronyms used.

If you are reproducing a 'text box' or a list of bullet-points from another work, you can present it either as a straightforward piece of quoted text (giving a clear and appropriate citation), or as a labelled table (with an equally clear indication of the source).

Tables of data, e.g. published demographic information, also need to be referenced as clearly as you would any direct text quotation.

You should cite the source of the table or figure as you would cite any other piece of information. Include the original page number and table/figure number in your caption and include the source in your references. For example, the caption in your text may look like this:

Table 1 – Hazard ratio of disability according to physical activity, consumption of fruit and vegetables, smoking, alcohol drinking, and number of unhealthy behaviours, excluding first four years of follow up (n=2584) (Artaud 2013, Table 3).

The reference in your reference list will be:

Artaud, F, Dugravot, A, Sabia, S, Singh-Manoux, A, Tzourio C & Elbaz, A 2013, 'Unhealthy Behaviours and Disability in Older Adults: Three-City Dijon Cohort Study', *BMJ*, vol. 347 pg. F4240, doi: 10.1136/bmj.f4240.

If you are reproducing an image/photo/diagram/graph or similar from a public source, you should cite and reference it in the format relevant to the source you took it from – e.g. a journal-format reference for a graph originally published in a journal article; a web-format reference for an anatomical diagram you found on the internet. For example, an image taken from the School's digital asset management system AssetBank might be cited as:



Figure 3, Larval tapeworms from a case of sparganosis (2009).

The photograph would then be listed in your reference list as:

Larval tapeworms from a case of sparganosis 2009, AssetBank, London School of Hygiene & Tropical Medicine, file PL-6116.tif, viewed 22 July 2010, https://lshtm.assetbank-server.com/assetbank-lshtm

Also remember that if you find images using a search engine like 'Google images', you need to click through to identify the original source and cite that — do not cite Google images (this principle applies to absolutely anything you find using a search engine).

Tables, text boxes or lists that are entirely your own work do not need a citation or reference. However, they <u>do</u> need a caption.

If you are using a photo you have taken yourself, you should indicate its provenance by giving a citation with your name, an approximate date or year, the location of the photo setting, and any other details that may be relevant. You do not need to give a reference in the reference list.

If you are using a photo taken by a personal contact (e.g. a colleague at a field site) who has given you permission to use it, you should cite that individual as the source and also include date and location. If the photo is relevant to the academic content of your work (e.g. a photo of a parasite you are studying), you should also give a full reference in your reference list. However if the photo is

simply for visual interest, you do not need to list it in your reference list (see section D.4).

Finally, if your work is to be published, whether in print, or online only, remember that you will need to obtain specific permission from the copyright owner(s) to include each table, figure or any other material you wish to reproduce in this way.

E. Using reference management software

Various computer software packages are available which allow references to be readily recovered from databases, easily inserted into your document, and automatically adjusted whenever any other alterations are made. These are known as 'reference management' packages or 'reference managers'.

The School supports a package called EndNote (available on School network for London-based student, or for purchase at preferential rates by all students). You may alternatively wish to use one of the many free, cloud-based packages, such as Mendeley, Zotero or RefMe.

You are strongly encouraged to become familiar with the use of one of these (or another reference manager if you prefer) from early in your studies. It will be particularly helpful to learn to use such a tool before you start any extended literature searches.

E.1. Benefits of using reference management software

Software packages such as EndNote can greatly simplify your referencing – maintaining accuracy while reducing the amount of time you need to spend inserting or updating references in your documents – and are especially useful for longer pieces of work such as projects, dissertations and theses. They all cover the same core functions:

- Reference managers store and manage bibliographic data, and act as a mini-database of references you are using. You can retrieve comprehensive reference information directly from many online databases, saving you the time of typing them in by hand.
- After inputting your references, they can be searched, sorted and grouped, and you can add your own notes, tags and comments. Grouping relevant items or adding notes and tags while conducting your literature search is a

- good idea, as it should make it easier to identify these topics again later on when writing up relevant parts of your work.
- These packages link in with word processing applications like Microsoft Word. This lets you easily insert correctly-formatted citations throughout your document while you are in the process of writing it. The software can automatically create and update a reference list at the end of your work.
- References can be presented in whichever format you desire from a selection of available styles (e.g. Harvard or Vancouver – with the option to re-format from one to the other with a single button-click). The software can automatically adjust for any later edits or alterations, for example renumbering in Vancouver style if an extra reference is added.

E.2. Which reference manager to use

EndNote, Mendeley and Zotero all do fundamentally the same thing but in slightly different ways, and with different advantages. EndNote is the most well-known but needs to be paid for to use on your own computer. Mendeley and Zotero are both free, and also offer functions like online collaboration and sharing of reference files. The following further information may help you decide what to use or try:

- EndNote, <u>www.endnote.com</u> is a desktop application from the US multinational company Thomson Reuters. It's a well-established package and has been used at the School for many years. If you are based in London, it is available to use for free if connected to the School's network (either at a School computer, or via remote access). However, you will need to buy the software if you wish to install it on a personal PC or laptops. Students of the School are eligible for a discount on the price.
 - Key benefits: It does the job, is well-known, and is able to import references from most online databases. Has a very comprehensive range of almost 4000 bibliographic output styles, including for most well-known journals. For London-based students, it's on the network with specific training available. The latest versions can store your PDF files.
 - Any drawbacks: You need to pay for it unless you are using the School's network, so less recommended for distance learning students. Can only be used on the specific computer it's been installed on. Is not designed with online collaboration in mind.
- **Mendeley**, <u>www.mendeley.com</u> is a free desktop and web-based application provided by Elsevier, a large commercial publisher.

- Key benefits: It does the job, it's free, and it can also import references from most online databases, and has sharing /collaboration features. Stores PDF files and allows you to extract data from them e.g. bibliographies. Being both desktop and web-based means it can be used either on your own computer offline, or at another computer via the web.
- Any drawbacks: You need to register online to use all features (though this is still free). ITS will not be able to support you if you have any problems.
- Zotero, <u>www.zotero.org</u> is a free web-based open-source application from a US not-for-profit organization (linked to a university).
 - Key benefits: It does the job, it's free, and it can import references from most online databases, and has sharing /collaboration features.
 Being web-based means it can be used almost anywhere.
 - Any drawbacks: Zotero can only be used with certain browsers. It was developed for use with Firefox, but a standalone version can be downloaded which can be use with Firefox, Safari or Chrome.

E.3. Guidance and training in using reference managers

Guides for using EndNote are available from the IT Training Team's courses on Moodle. The School also runs regular workshops on EndNote for London-based students.

F. Further resources about citing and referencing

The guidance earlier in this chapter sets out the School's standard expectations about citing and referencing. However, during the course of your studies you may come across types of material that have not been detailed above and which you are not sure how to reference; or you may want to use an alternative referencing style to best suit the type of work you are doing.

Various recommended resources and guides are listed below which describe good practice in referencing and citing. While they may each suggest different approaches, you are likely to find the answers or instructions you are looking for in at least some of them. Otherwise, you can ask staff (such as your tutor, supervisor or the Module/Programme staff responsible for the assessment you are taking) to suggest how they would prefer to see a particular item referenced. Library staff may also be able to provide guidance if you are stuck.

F.1. Guides to referencing systems

Recommended:

- Harvard system: http://guides.lib.monash.edu/citing-referencing/harvard from Monash University Library, Australia. This is a helpful guide to the Harvard (author/date) style, with a large number of different examples, including a PDF guide.
- Vancouver system: www.nlm.nih.gov/citingmedicine from the National Library of Medicine in the USA is seen as the definitive guide to the Vancouver system. It is periodically updated with details of how to cite over 50 different reference types.

Also potentially useful:

- The book 'Cite them right' by Richard Pears and Graham Shields is a widely recognized standard explaining how to cite hundreds of different types of materials in the correct format. It is available from the Library, or relatively cheap to buy. Pears, R & Shields, S 2013, Cite them right: the essential referencing guide, (9th ed) Palgrave Macmillan, Basingstoke. 102 pages. ISBN 978-1137273116
- www.imperial.ac.uk/admin-services/library/learning-support/referencemanagement/ – from Imperial College London. This includes detailed guides to both the Harvard and Vancouver referencing systems, with extensive examples of how to reference different types of source material in-text and in a bibliography.
- Other referencing systems: http://guides.lib.monash.edu/citing-referencing/home from Monash University, Australia. This has links to a variety of guidance on different citation styles. including APA and MLA.

F.2. Guides to citing and referencing in general

Recommended:

http://library.leeds.ac.uk/skills-referencing – from the University of Leeds
 Library. Comprehensive resources about referencing and citing, with further
 information on different referencing styles including Harvard and Vancouver.
 Click through to the pages 'About' a particular style you are interested in,
 then 'Further resources / Downloads' to download an interactive tutorial.

Also potentially useful:

- http://writing.yalecollege.yale.edu/using-sources from Yale University. A very good guide to using sources, included as part of the wider suite of resources from the Yale Writing Center.
- http://www.princeton.edu/pr/pub/integrity/pages/cite/ from Princeton University. A good summary of when and how to cite sources, which forms part of a larger set of pages about academic integrity.
- www1.uwe.ac.uk/students/studysupport/studyskills/referencing.aspx from the University of the West of England. An introductory guide to referencing, plus specific guidance on some of the main citation systems.

Chapter 3: Avoiding plagiarism and other assessment irregularities

As a student of the School, you are expected to comply with our standards and expectations in all your scholarly activity – especially assessments, examinations and research.

This chapter sets out the School's definitions of "assessment irregularities" – things you must not do in your work. It is important that you make yourself aware of these definitions. Any breach of the rules, whether intentional or unintentional, will be treated very seriously and may result in penalties which affect your degree.

The definitions are followed by guidance about how to ensure your work follows the rules. A worked example shows how to avoid plagiarism, building on the citing and referencing guidance given in the previous chapter.

Please consult your tutor, Programme Director or supervisor if you are having any difficulties with assessed work, need clarification or guidance about citing and referencing, or are in any doubt about what is permissible.

A. Assessment irregularity definitions

The term 'assessment irregularity' applies to any suspected instance of plagiarism, cheating, fraud, collusion, personation or other non-standard activity identified in connection with assessed work – including essays or other coursework assessments, formal examinations, or research projects. Definitions are given below.

Note that the term 'irregularity' does not necessarily imply misconduct on the part of a student. Judgement as to whether a specific offence has occurred will only be made following proper investigation of the case under the School's procedures.

It may also be helpful to observe that although these definitions and guidance are specific to LSHTM, understanding and applying them as good scholarly practice may be relevant in your work after graduating. The School's principles on issues such as plagiarism or fraud are consistent with typical expectations in academia or scientific research around the world.

A.1. Declaration on plagiarism and cheating

All students are required to sign a statement confirming that they have read the School's definitions of plagiarism and cheating (which follow); that all work submitted is and will be their own; and that failure to comply with the School's policies may be penalised.

This declaration also covers consent for the School to upload relevant documents and information to external services or third parties, in order to identify potential plagiarism or irregularities. The School uses the plagiarism detection service Turnitin UK for cross-checking assessment submissions – further information about this is given in section C.

For specific items of assessment – particularly MSc project reports and Research Degree theses – students may be required to complete additional specific forms, e.g. to reiterate that the work presented in the thesis is their own, or to acknowledge and describe the contributions of others.

A.2. Plagiarism, and how to avoid it

Plagiarism is the copying or use of the work of others, whether intentionally or unintentionally, as if it were your own. Such work may come from any source whether published or unpublished, in print or online – including words, images, audio recordings, diagrams, formulae, computer code, performances, ideas, judgements, discoveries and results.

To avoid plagiarism:

- Where any use or mention is made of the work of others, it should be acknowledged.
- A recognised citation system should be used.
- Quotations must accurately refer to and acknowledge the originator(s) of the work.
- Direct quotations, whether extended or short, must always be clearly identified.
- Paraphrasing using other words to express the ideas or judgements of others – must be clearly acknowledged.
- Work done in collaboration with others must appropriately refer to their involvement and input.
- Use of your own past work should be referenced as clearly as the work of others.

To put this another way: plagiarism is essentially the presentation of another person's work (such as their words or ideas) as if it were your own — even if this is done accidentally. The School expects all students to demonstrate rigorous and respectful academic practice at all times, particularly through referencing and citing as described in the previous chapter. Plagiarism is considered wrong because it does not clearly indicate where prior work or knowledge has been used, it is disrespectful to the original authors, it is misleading for those teaching you and marking your work, it may give the impression that you are trying to gain credit for someone else's achievements, and it may be harmful to the reputation of the School and the University.

You should also understand that plagiarism is not the same as copyright infringement, which is unauthorised use of published work. Plagiarism is about failing to correctly acknowledge the use of any sorts of intellectual property or source material. Copyright infringement is more specific, and may have additional legal and financial implications

To avoid plagiarism, all sources which you draw from must be properly indicated and referenced, using a recognised citation system. This is vital for all work completed outside classes or exams – such as coursework, essays, project reports and research theses. Every time you quote or summarise someone else's work, you must provide readers with accurate details of where the information came from. Further details are given in Chapter 2.

Note that failure to observe the rules, even unintentionally, may constitute plagiarism and be penalised accordingly. Most cases of plagiarism are not due to students deliberately copying the work of others and trying to pass it off as their own, but because information they used was not appropriately acknowledged or referenced. It can be easy to copy text but forget to add the appropriate reference; however you must make every effort to avoid doing so, or else you run the risk of committing plagiarism. The School has sophisticated mechanisms for detecting plagiarism, some of which are outlined at the end of this chapter.

Your referencing must also be accurate; if a reader checks one of your references and doesn't find the information expected, the source is termed 'unacknowledged' and you may be accused of plagiarism.

A.3. Collusion, and how to avoid it

Collusion is any form of collaboration with another person, including another student, which has not been clearly acknowledged or permitted for assessment

purposes (either when being submitted, or during the course of an examination). Different forms of collusion may be regarded as either plagiarism or cheating.

As with plagiarism, the essence of the School's policy on collusion is that **all input to your work must be clearly acknowledged**. Further key principles to note are:

- Sources: While the School encourages students to learn from each other and to make full use of the expertise of staff, we also need to know what you individually know, understand and can do. Therefore anything submitted for assessment must be your own work. It will always be important to note where you have drawn ideas from others, even via informal means e.g. making use of (unpublished) Moodle discussions with other students about a topic must be acknowledged.
- Appropriate input: Other people may potentially have some input to your work, but this must be appropriate for the task you have been asked to undertake. For example, it is normally fine for a tutor to read your work and give you critical comments before you submit it; but not for them to rewrite it for you. Equally, it is normally fine to ask a friend or family member to read your work and check the spelling and grammar, but not for a peer (especially anyone with specialist subject knowledge) to edit it in a way that changes the meaning of text or the accuracy of data and calculations. In all cases, the input of others must be explicitly acknowledged in your submitted work. Further guidance on how to do so is given Chapter 4.
- **Group work:** While the majority of assessments at the School require an independent piece of work, group work assignments may also be set. In these cases, the final submission from the group must constitute the work of the group, and any input from others (such as guidance from a tutor) should be clearly acknowledged further guidance on this is given Chapter 4. The submission is normally expected to have been based on roughly equal contributions from group members, although some variation in contributions may be reasonable. However, full participation is a requirement in order to pass your programme overall, and students who do not contribute adequately to their assigned group may not be eligible to receive a grade or credit for the work of that group.
- **Similar answers:** Where an assessment question is likely to produce very similar answers from students (e.g. mathematical-type problems, or requests to describe a specific lab procedure), markers will know to expect this. However, any indications that answers have been directly copied from an identical source may result in a charge of collusion.

- Deliberate collusion: Where input from others has been used but concealed, this will be treated very seriously and is likely to constitute cheating (see also the definition of personation in section A.4). Examples could include asking another student to write or edit part of any assignment; or two students collaborating to produce an assignment, then submitting either identical or very-slightly-amended versions which each claim as their own work rather than acknowledging the other.
- **Secondary collusion:** All students are individually responsible for safeguarding their own current or past work e.g. assignments, essays, projects, reports, dissertations, theses, or even primary work such as notes, lab results or fieldwork data to prevent it from being copied inappropriately by other students or persons. If you make your work available to others, you should remind them to acknowledge you if they use it, and that they must not copy it without attribution. Failure to do so on your part may make you liable to a charge of collusion.

A.4. Personation, and how to avoid it

Personation is the deliberate submission of work done by another person (e.g. another student, a friend, a relative, a peer, a tutor, or anyone else) as if it were one's own. Such work may come from any source whether published or unpublished, in print or online – including words, images, audio recordings, diagrams, formulae, computer code, performances, ideas, judgements, discoveries and results.

This may cross over with a range of other offences; submission of another person's work with their knowledge is likely to constitute collusion; doing without their knowledge may constitute plagiarism; representing a piece of joint or group work as the student's own is likely to constitute fraud; and deliberately procuring work from sources or commercial entities such as essay banks would be very likely to be considered cheating. Arranging for another person to falsely identify themselves as a student and take an exam on their behalf would be seen as a particularly severe form of personation and cheating.

The above definition should be self-explanatory, and it should be clear that personation is a very serious offence which will be treated accordingly. Again, the essence of the School's policy is that your work must be distinguished from that of others – including that all sources which you draw from must be clearly acknowledged.

A.5. Fraud, and how to avoid it

Fraud is the submission of any work which may cause others to regard as true that which is not true. This covers work which has been fabricated (e.g. with invented data or cases), falsified (e.g. with wilfully distorted data), omits significant items (e.g. ignoring outliers, not admitting that some data are missing, not admitting other relevant post-hoc analyses, omitting data on side effects in a clinical trial, non-disclosure of a conflict of interest, etc.), or in any way misrepresents the work or research carried out. Fraud may be by intention, by disregard of possible consequences (e.g. in failing to adequately describe the input of others), or by negligence (e.g. submission of work based on distorted data due to poor data handling practice). Assessment or research fraud may cross over with a range of other offences, from plagiarism (e.g. unattributed copying of the research data of others) to cheating, collusion or personation.

Fraud is a strong word, but also a difficult concept to define for academic work. The essence of the School's policy is that all work you do should demonstrate a commitment to scientific truth, the advancement of genuine knowledge, and values of the academic community. Personal or other interests should never over-ride these commitments.

The most serious forms of fraud are deliberate – fabricating or falsifying work, or omitting significant items, while knowing that this misrepresents the work done (or not done). This is likely to constitute cheating, and will be treated severely by the School.

Please also be aware that non-deliberate errors may result in work whose substance is essentially fraudulent. It is vital that all students make the effort to understand what constitutes good practice for the type of work they are undertaking (which may be specific to the subject), and the type of programme they are registered for. Higher standards are expected for higher awards, such as Master's degrees or research degrees. While the School understands that students may make mistakes as part of the learning process, and will treat cases appropriately, ignorance can be no excuse for errors which affect fundamental academic standards.

To help clarify the definition, some key principles to note include:

• **Fabricating** (making up) data, quotes, results or any other aspect of your work should be self-evidently wrong, and will be treated as fraud.

- Falsifying data or other elements or work is equally serious if done intentionally. However this may also happen unintentionally e.g. by accidentally copying data into the wrong column, by mixing up the attribution of quotes, or by making a mistake in calculations. If poor presentation or writing results in misrepresentation of facts, this will normally just be 'marked down' and not treated as fraud. Nonetheless, errors considered to be seriously negligent may be penalised under the Assessment Irregularities procedure, even if they were not necessarily deliberate.
- Omitting relevant information may also be treated as fraud. Deliberate omissions of important matters are very liable to be treated as fraud for example not disclosing a conflict of interest, failing to acknowledge a contributor or credit a co-author, or not admitting that you did other analyses which reached different conclusions to the ones now put forward. Accidental or unintentional omissions may also in some circumstances be penalised under the Assessment Irregularities procedure, particularly if they demonstrate negligence in your academic work for example omitting data on side effects in a clinical trial, failing to obtain ethical approval where this was required, using participant data for which consent was not obtained, or not mentioning gaps in your results.

Teaching and guidance provided as part of the preparation for an assessment will always make clear what is expected of you, and mention any major errors to be avoided, such as failure to seek necessary approvals. Where errors or poor practice occur (e.g. sloppy data handling which brings in false data, or disregarding outliers in results due to a lack of understanding of what they might mean), these will usually be seen as part of the learning process – getting a lower mark, rather than being penalised.

A.6. Cheating

Cheating is a deliberate attempt to deceive in order to gain advantage in an assessed piece of work, including coursework, in-module assessments and examinations. This covers a range of offences, from significant instances of plagiarism to exam misconduct.

The School's policy on cheating is that **you must not engage in any deliberate deception** in order to gain advantage in formal assessment or evaluation. Key principles to be aware of include:

- Submitting someone else's work, knowledge or ideas, while pretending that they are your own, constitutes cheating.
- This applies to all forms of assessment e.g. coursework assignments, presentations, group work, module tests, formal examinations, research project reports, or theses.
- Serious forms of plagiarism, fraud, collusion or personation, or any deliberate failure to comply with assessment regulations, are all liable to constitute cheating.
- The use of commercial essay banks, essay-writing services or any similar "cheat sites" is highly likely to constitute cheating.
- Any inappropriate activities under exam conditions, e.g. bringing unauthorised materials into an exam room, will also constitute cheating.

Cheating will be treated even more seriously and result in heavier penalties than other forms of assessment irregularities.

B. Assessment irregularities procedure

The School's formal Assessment Irregularities procedure, established under the Regulations, sets out how any allegations will be investigated, and the potential penalties that may be applied. This is available via the School intranet at:

https://lshtm.sharepoint.com/Teaching-and-Support/Pages/plagiarism-assessment-irregularity-resources.aspx You do not need to be aware of the detailed content of this procedure, but you should be aware that it exists. In the event that an allegation or case arises which affects you, anything you are required to do will be clearly communicated and explained. Your tutor, supervisor, Programme Director(s) or the Registry should all be able to provide further advice if necessary.

B.1. Penalties

Where an assessment irregularity is identified and confirmed, a range of penalties may be invoked – e.g. a reduction of the grade, or an outright fail for the piece of work with a requirement to re-submit. The nature and extent of each case will differ, so there is no standard set of prescribed penalties in relation to specific offences. However, severe offences may result in students having their registration on a programme terminated, or even being excluded from entry to any further School examinations or future degree/certificate awards from the School.

The above details are not intended to frighten you; occasional slips in attribution or similarity of text may happen with even the most diligent student. All relevant factors will be taken into account in consideration of any case, and students will be presumed innocent unless the contrary can be established through formal procedures and on the balance of probabilities. However, please do not be tempted to copy material; plagiarism and other offences are easy to detect, and the risks are very high. It is not unusual for one or two students a year to fail an entire module or even their entire degree programme due to assessment irregularity issues, including for plagiarism.

C. Detecting plagiarism

School staff have a responsibility to ensure that all students' assessed work is marked fairly and equitably – this includes checking for plagiarism or other issues, to ensure that no-one gains an unfair advantage. Staff have considerable expertise in identifying plagiarism, and all markers look out for assessment irregularities and have access to a variety of tools to assist them.

The School uses the plagiarism detection service Turnitin UK, which is widely used by universities across the country and recommended at national level by the Higher Education Funding Council for England and the Joint Information Systems Committee Internet Plagiarism Advisory Service.

Any work you submit for assessment may be cross-checked using Turnitin. Administrative offices (for Teaching Support, Distance Learning or Research Degrees) and marking staff all have access to upload School student work. This is done anonymously, by candidate number, and this material cannot be seen by others unless permission is given by School staff.

C.1. How Turnitin works

Turnitin compares students' work against a very extensive pool of journals, periodicals, books, databases, current and archived internet pages, and other published or grey literature, as well as previously submitted student work from subscribing institutions around the world (including from current and past LSHTM students). At the last count, in 2012, Turnitin covered 24+ billion pages of web content (including archived content no longer available), 120,000+ professional, academic and commercial journals and publications, 250 million student papers, which was continuously being added to at a considerable rate every day.

Turnitin creates an 'originality report' for each piece of work run through it, highlighting which elements have come from other sources in the database, and to what proportions. This also provides tutors with links to the source files, and the facility to compare matching text between the submitted work and the originals. As in the above screenshot, Turnitin is capable of matching text even where words, phrases or entire sections have been changed, removed or reordered.

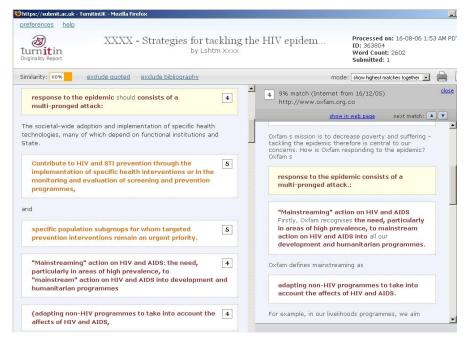


Figure 1. Turnitin screenshot, comparison against an individual text source

C.2. What happens when suspected plagiarism is identified

Turnitin is just a tool, and does not make any 'decisions' about students or their work. Rather, it provides information for members of academic staff to review any work that contains copied text, checking that this is referenced correctly and not presented as a student's own work. All submissions will normally contain at least some matches to the Turnitin database, e.g. properly-cited quotes, or items in the bibliography. There is no set percentage up to which Turnitin matches may be allowed or not allowed – in all cases, it is up to staff to check

whether citations are legitimate or whether work has been plagiarised. Should potential plagiarism be identified, this will be followed up through the School's Assessment Irregularities procedures.

If you would like to know more, information about Turnitin is available at www.submit.ac.uk

D. Tips to help you avoid plagiarism and other assessment irregularities

D.1. Leave enough time for the research process

Many students underestimate the amount of time it takes to find and obtain sufficient high quality resources. Particularly when conducting a research project, you will usually be expected to read and digest information from a wide variety of sources before writing your thesis. When students are pushed for time they are far more likely to be tempted to plagiarise.

Once you have then got hold of the information you have found, evaluated it, and digested the information, you may then have to go back to the beginning of the cycle to follow up points of interest or clarify issues. As a rule of thumb, estimate how long the research process will take and triple it.

D.2. Use clear note taking techniques

When taking notes from a source, ensure you clearly mark the words you copy directly, by placing them in quotation marks, highlighting them or in other ways making them distinct from notes in your own words. If you do copy directly from the source, copy it exactly as published, including all punctuation and formatting (e.g. words in *italics*).

Ensure you note the full citation information of the source both on any notes you make and onto any photocopies. Many journals include the source information in the header or footer of a printed article but books rarely do. It can be next to impossible to determine from which book a chapter or set of pages has been photocopied after the event.

D.3. Keep an up to date list of your potential sources

Keep a working list of the sources you have found during your research. As well as assisting you in compiling your bibliography at the end of your thesis, this will

also allow you to keep track of which sources you have read and which you have discarded and why. Using a reference management software package, as described in Chapter 2, can be a powerful tool to keep track of sources you have identified and found useful, as well as providing a quick and easy way to insert citations and references into your final submission.

Chapter 4: Recognising the contribution of others

Any individual work you submit for assessment at the School should be based on your own ideas and judgments, expressed in your own words, and supported by appropriately-referenced use of the work of others – as described in Chapter 2. However, it can be appropriate (particularly for significant pieces of work like MSc projects) to receive further support and input from other sources, for example:

- advice from your tutor or supervisor on academic content;
- help from technical experts regarding areas like laboratory procedures or statistical methods;
- assistance with fieldwork, e.g. where others have collected data on your behalf:
- or suggestions about writing style or language use from peers, friends or family.

In certain cases, particularly for some MSc projects or research degree projects, you may be undertaking work towards your School degree that forms part of a larger professional research study. Such studies may be carried out under the aegis of the School, or another research institution, or a government, or an NGO, or even (for students studying part-time or by distance learning) your employer. In such cases you will need to have your own defined sub-set of work, so it can be clearly assessed; but you are also likely to need to collaborate closely with others, including having the scope of your work set out by the 'Principal Investigator' (PI).

This chapter describes how to indicate and acknowledge all such contributions from others towards your assessed work.

A. Principles for acknowledging input from others

To be able to mark all work fairly, markers should <u>always</u> be made aware of any support or input you have received from other people.

 All assistance received from others should be clearly specified, to distinguish the main body of work done by yourself from any other supporting/enabling work where you have had help.

- Any additional resources made available to you should also be clearly specified – for example, to make clear where a dataset has been provided to you for analysis (as opposed to your collecting the data yourself).
- Such input and support should be indicated at the relevant points throughout your work.
- For major pieces of work, you should also give appropriate credit in an Acknowledgements section.
- Acknowledgements can be given anonymously (e.g. referring to help from a supervisor, Research Assistant, lecturer, fellow-student, friend or a family member) rather than by name. The aim is to indicate the type and level of input received, rather than from whom.

A.1. Marking of work

Assessments that you are set as part of your School studies should always make clear what kind of work they expect you to do and how much time and effort this is expected to take. Criteria may also clarify what types of input it may be appropriate to get from others.

Work will not be 'marked down' for receiving additional support in a particular area, provided this in line with the assessment criteria and means that your own contribution to the work meets what is expected. Conversely, please be aware that work you do that goes beyond what is required for the assessment will not be rewarded with extra marks – you can be marked only against what is in the assessment criteria. However, if information about support or input received is incorrect or omitted, this may be subject to penalties under the School's assessment irregularity procedures.

To give two examples:

- If you want to do a piece of work that requires a qualified member of staff to carry out a specific laboratory procedure, this should be fine provided the total work you do, e.g. design of experiment and subsequent analysis, is of an equivalent amount to that of other students who may be doing their own lab work. However if your final submission does not specify which elements of your assessment have been assisted by others, you may be penalised.
- If you are working on something that is part of a larger research initiative
 and elements of your work have been designed or prescribed by the
 Principal Investigator, this should be made clear in your submission and
 less detail would need be given on those elements. However if this is not
 made clear then such work may be penalised or marked down e.g. for

misrepresentation, or for having given insufficient detail about work otherwise assumed to have been done by you.

A.2. Group work

In some cases, you may be part of a team when undertaking assessed work. Arrangements may require either a single joint submission from the group, or separate individual submissions (typically drawing on the work of the group but allowing you to give your own interpretation or additional input).

Joint submissions must constitute the work of the group, and should normally be based on roughly equal contributions from all members – although some variation in contributions may be reasonable, and may be spelt out. Any input from others (such as guidance from a tutor) should be clearly acknowledged.

Individual submissions should make clear what work was done or conclusions reached by the group, and differentiate this from the any further individual work done by you separately from the group.

B. Proof-reading and help with writing or language

B.1. Proof-reading and advice from others

Proof-reading means checking for any grammar, punctuation or spelling errors that need to be corrected. Spell-checking or grammar-checking software (as included in most word-processing packages) is a useful tool which you should always use; but remember that there are many issues that software cannot necessarily spot, like incorrect use of specialist or technical terms. Therefore, re-reading and checking things in person remains very important.

Whatever your standard of English, you should always proof-read your work before sending it on anywhere, even in draft form, and correct any obvious errors before submission. If markers see evidence of unnecessarily 'sloppy' writing that demonstrates insufficient attention to accuracy (in reporting other work or checking what you have written), this may cause you to be marked down.

After checking your draft yourself, it can then be appropriate to also ask other people – e.g. a fellow student, family member or friend – to proof-read it or give comments on your choice of words. You may ask a peer who knows the academic subject area (e.g. a fellow-student) to give comments on the content.

However, you must always make the final decision about what is included and how it is expressed, as well as ensuring your final submission acknowledges any assistance you have received.

You should <u>not</u> have anyone else extensively edit or rewrite your assessed work for you – e.g. in such a way that the language used no longer represents your own expression of the work done, or so that another person than yourself has made decisions about the content or presentation of the work put forward. In particular, you should be aware that the use of 'professional' (paid) editors is strongly discouraged by the School.

B.2. Proof-reading and copy-editing for research degrees theses

For research degree theses (PhD, DrPH or MPhil), in addition to the above, further expectations apply to the standard of writing expected. Submitted theses should be structured and of a sufficient standard of English so as to be ready for academic publication without needing any further editorial corrections by a third party. Specific rules on copy-editing and proof-reading are given in the research degrees handbook.

This defines 'proof-reading' as checking a manuscript prior to publication / printing, to identify any grammar, punctuation and spelling errors requiring correction — which should then be done by the author. 'Copy-editing' is defined as the process of checking/revising a manuscript against a prescribed style (in terms of paper size, page layout, fonts, heading styles, word count, pagination, sequential numbering of tables etc.), making alterations necessary to ensure consistency and remove any duplicated content.

Proof-reading and copy-editing are both skilful processes which require good English language proficiency, but not specialist subject knowledge. You as the author may proof-read and copy-edit your own work; or ask someone else to do so for you, provided you acknowledge them. If a third party proof-reads or copyedits your work, they should be reviewing or correcting the surface text of the document – not altering textual meaning or the accuracy of data.

While the School discourages the use of professional or paid editors, research degree theses are the one form of work (given their length and complexity) where this may sometimes be appropriate. If so, you as a research degree student will be responsible for making any arrangements, in consultation with your supervisor, and for any associated costs such as fees. The School's policy is that any proof-reading or copy-editing by third parties, whether paid or unpaid, must be acknowledged in a declaration accompanying the submitted thesis.

This will be available to the examiners. You as the student will be responsible for ensuring that any third-party contributions have not introduced changes to the intellectual content or substance of the thesis. Note that if third-party input introduces any deficiencies in the work, these cannot be accepted as mitigating circumstances affecting the outcome of the thesis examination.

C. Giving acknowledgements

You should <u>always</u> acknowledge all input or assistance which has had a material impact on your work. This may include:

- Any specific input from other people e.g. editing, proofreading, specific academic advice or ideas, general advice or ideas such as on structuring your work, assistance with collecting data in the field or in a lab, technical support, translation services, etc.
- Any specific permissions you were granted for your work e.g. for use of copyrighted material, use of a specific dataset, use of a patented process, etc.
- Any financial assistance or equivalent support especially any funding or grants which have supported the work done, but also things like access to facilities or resources which might not have been automatically available.

C.1. Including an Acknowledgements section

For extended pieces of work, it will often be appropriate to include an Acknowledgements section.

You should always indicate the following types of assistance if received, under a sub-heading of 'Formal acknowledgements':

- The input of your supervisor or tutor, and any co-supervisors or technical advisors where appropriate – especially where local support and collaboration has been given either overseas or at another institution. Acknowledgement may be given in a form like "my supervisor" or "my tutor" rather than using individual staff names; or they may be named if more appropriate.
- Any specific input to your work e.g. editing, proof-reading, specific
 academic advice or ideas, general advice or ideas such as on structuring
 your work, assistance with collecting data in the field or in a lab, statistical
 support, lab technical support, support in respect of a specific disability,
 translation services, etc.

- Any specific permissions you were granted for your work e.g. for use of copyrighted material, use of a specific dataset, use of a patented process, etc.
- Any financial assistance or equivalent support especially any funding or grants which have supported the work done, but also things like access to facilities or resources which might not have been automatically available.

You may also wish to recognise and express appreciation of other people who contributed in ways which didn't directly change your work, under a sub-heading of 'Personal acknowledgements'.

- This may include family, friends, staff or others e.g. to thank them for encouragement, support, motivation, inspiration or similar. Who and what you choose to include under this is completely up to you.
- However, to help ensure the anonymity of assessed work, it is generally better to express thanks to "my family" or to friends using first names only.

In terms of style, you can write an acknowledgements section however you like. It's best to keep it clear and simple and short, e.g. thanking each specific person/group for the specific input/assistance received.

In an extended piece of work that includes an acknowledgements section, this should normally be placed towards the end – either before or after the reference list. You may take a different approach if you prefer, e.g. listing copyright permissions in a separate section with its own heading, or mentioning translation services at the point in your text where you make use of the translated work. In some cases you may wish to give important acknowledgements or a dedication in a very brief note after the Title page at the start of the work; but if so, this should normally be no more than two or three lines.

C.2. Research participants

Where you have undertaken primary research with human subjects or participants, it is customary to thank them in the acknowledgements section. This should normally be done anonymously, i.e. simply thanking them as a group. It is vital to ensure that you fully understand any ethics-related obligations that apply to you regarding anonymity and confidentiality. For example, any interviewees should have given consent for how they may be named and quoted, and should typically be referred to as anonymous individuals, e.g. 'Respondent A', throughout the work.

If you will be working with research participants, please ensure you are completely familiar with the School's rigorous ethical requirements regarding such activities, including how they should be written up.

C.3. Additional requirements

Note that for specific items of assessment – particularly MSc project reports and Research Degree theses – students may need to complete additional specific forms, e.g. to reiterate that the work presented in the thesis is their own, or to acknowledge and describe the contributions of others.

Chapter 5: Copyright and intellectual property

Note – for MSc students, some of the information in this chapter will be duplicated in your project handbook. For research degrees students, these issues may be more complex and you should follow advice given in the research degree handbook.

Further guidance and help can be found on the Library & Archives Service' copyright guidance pages

(https://lshtm.sharepoint.com/Services/library/Pages/copyright.aspx) and specific queries can be sent to copyright@lshtm.ac.uk

A. School policies for student work

As well as ensuring that you correctly reference everything you make use of in your work, you also need to be sure that you are allowed to make use of the work of others – being aware of any copyright or intellectual property rights that may apply. You should be certain about whether any restrictions may apply in the way you communicate, disseminate or even publish work that you have produced based on that of others.

A.1. Copyright and intellectual property rights

These issues can be defined as follows:

- Copyright subsists in any original work (or part of that work) from the
 moment it is created. The rights holder (usually the author, but in some
 cases the employer) is granted certain rights which are protected by law
 over how the work may be used this includes copying.
- Intellectual property (IP) is an intangible asset whose broadest scope covers all types of knowledge, but which is generally focused on patents, know-how, copyright, trademarks, brand names, designs & secrets. Most forms of IP can be protected legally (with the exception of know-how and secrets) and the resulting proprietary rights are referred to as **intellectual property rights** (IPR).

The copyright of work you produce during your studies at LSHTM will normally legally belong to you as the author of the work. There may sometimes be exceptions to this however – usually if this is research work subject to the terms and conditions of a specific agreement.

If you are making use of the work of others, their copyrights and intellectual property rights also need to be carefully respected. This may apply not just to written work, but to other forms of work carried out by third parties – e.g. data collected, photographs taken, diagrams drawn, computer code written, etc.

Especially if you are unfamiliar with these issues, please look through the introductory guidance on the Library & Archives Service's web pages at https://lshtm.sharepoint.com/Services/library/Pages/copyright.aspx, which also link through (at the end of that web page) to further resources, including the School's IPR policy.

A.2. Copyright and IPR agreements for major work

For any significant pieces of work, e.g. MSc research projects, you should ensure that you discuss copyright and IPR with your tutor, supervisor or another relevant member of staff – both before embarking on substantive work, and as you complete writing-up.

Copyright or IPR agreements won't be necessary for most LSHTM student work, but may be appropriate in some cases – particularly:

- To clearly assign and specify ownership of IPR for data collected during the course of a research project (e.g. in the lab with help from LSHTM staff; or in the field, working with an external organisation).
- To clarify permissions given for use of data or other copyrighted materials
 provided by the School or an outside party which will usually remain the
 copyright property of the original party even where incorporated in your
 project report.

Where research funding is provided by an external sponsor, a specific contract will normally apply; contract terms may often assign ownership of copyright or IPR to the sponsor, or impose specific restrictions such as on publication. Similarly, where your work is to be undertaken in collaboration with an external organisation (e.g. working with their staff or at their facilities), it is very helpful to reach a clear agreement with them *before you begin* about the copyright and IPR of the results. This can avoid problems later on, e.g. if you or they want to do something specific with the work.

Likewise, where LSHTM staff (such as your supervisor) have supplied data or other key elements of your project and own the corresponding copyright or intellectual property rights, the position of both parties should be set out in a specific agreement. Standard LSHTM templates are available for such

agreements between student and supervisor, and may be edited as appropriate to create a specific agreement for each individual piece of work. Your Programme Administrator should be able to give advice. Once agreed, a copy of the final signed statement should be lodged with your Programme Administrator to be kept in your student file. You are also encouraged to keep a copy for your own records.

A.3. Copyright that otherwise applies to your work as a student

Unless you have signed a specific agreement to the contrary, the copyright that applies to your work as a student (including your final project report) is retained by you as the author. All students are asked to sign the School's registration declaration form when registering, which includes the following statement:

"I authorise that any coursework, project, dissertation or thesis presented by me for examination for a degree of the University of London may be deposited in the library of the London School of Hygiene & Tropical Medicine, and that, subject to the conditions set out below may be made available, either in print or electronically, for public reference, interlibrary loan and copying. I authorise the School Library and their designated agents to make a photocopy or digital copy of any such work for the purposes of inter-library loan and the supply of copies to library users and members of the public. I authorise the School to make a microform or digital copy of this work as the archival copy for permanent retention in substitution for the original copy. I authorise library users to copy up to 5% of the work for their own personal research for a non-commercial purpose or for private study."

A.4. Intellectual Property Rights - School policy

All students must notify the School, through their supervisor, of any invention, device, material, product, method or process, computer software or other potentially valuable result which it is considered might have industrial or technical significance, whether patentable or not, developed or invented during the course of a students' research or study whilst a registered student of the School and make assignment of their rights to the School.

It would be unusual for student work on taught programmes to generate significant new intellectual property meriting such notification. However, this may potentially be more relevant for research degree student.

A.5. Setting restrictions on access to your work

The School's standard policy, as described on the registration declaration, sets a standard right of access to student project reports for purposes of study and research. In rare cases, you (or external organisations or funders you are working with) may wish to restrict such access by others, e.g. not wishing to have your final project report placed in the School Library.

A restriction of access might typically be requested in relation to exploitation of the research or pending a patent application. It may only be granted by special permission of the School and the University up to a maximum period of 2 years, as outlined in a further point on the School's registration declaration form:

"A candidate may apply to the School for restriction of access, for a period not exceeding two years, to an MSc project, DrPH Organisational and Policy Analysis Project report or DrPH/MPhil/PhD thesis on the grounds of commercial exploitation, patenting or in very exceptional circumstances and in accordance with the procedure adopted by the School for consideration of such applications."

Restriction will not normally be granted <u>except</u> where the work is said to contain sensitive or confidential material or material that would infringe the rights of third-party holders of copyright.

B. Publication of student work

Work done as an LSHTM student may sometimes result in papers published in peer reviewed journals. Where work is to be submitted for publication, issues related to both authorship and obtaining copyright/IPR permissions need to be considered along with academic affiliation.

B.1. Authorship

As detailed above, you as a student will normally be the copyright owner and primary author of your project report. However, considerations of secondary authorship may come into play if your work is to be published – especially if:

- the project was done in close collaboration with others (e.g. working closely with a supervisor in the lab); or
- made use of notable contributions from others (e.g. statistical analysis carried out by a technical advisor and acknowledged as such); or

 was done as part of a larger programme of collaborative work (e.g. where your work was on a particular element within a larger field trial).

In such cases you may often need to credit others, e.g. your supervisor, as coauthors. Indeed, in cases where your work formed part of a larger study, it is likely that your supervisor or Principal Investigator would be the 'lead' author for any published work, with student contributors more likely to be listed as coauthors.

To help understand who should be credited as an author, the following notes have been compiled from guidance on the International Committee of Medical Journal Editors website, www.icmje.org

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 those who qualify should be listed. Each author should have participated
 sufficiently in the work to take public responsibility for appropriate portions
 of the content. One or more authors should take responsibility for the
 integrity of the work as a whole, from inception to published article.
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- Authors should provide a description of what each contributed, and editors should publish that information. All others who contributed to the work who are not authors should be named in the Acknowledgments, and what they did should be described.
- Increasingly, authorship of multi-centre trials is attributed to a group. All
 members of the group who are named as authors should fully meet the
 above criteria for authorship. Group members who do not meet these
 criteria should be listed, with their permission, in the Acknowledgments or in
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- The order in which authors are listed on the byline should be a joint decision of the co-authors, who should be prepared to explain it.

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B.4 Academic Affiliation

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