

Computing Honours Project

(COMP10034)

Lecture 3

‘Literature’ Review
(or Technical/Background Review)

Literature Review

The '**Literature**' or '**Technical**' Review can be presented as a single chapter (or 2 chapters) after the **Introduction** and before the **Primary Research**

You will be expected to **return to the 'literature'** during the **Discussion/Conclusions** chapters of your Hons Project

You will be expected to present the **significance** of your findings in the **light of other peoples' work**, and draw on other authors in **arguing for the recommendations or actions** you propose

Literature Review

The **Literature Review will** provide you with the **CONTEXT** in which to plan, implement and present your own work

Your Hons Project topic is very unlikely to be completely new/area not invented yet

You need to find out **what has already been done** and said and then **fit your work into this overall collection of work**

Literature Review

Knowing what to look for is a chief problem

What work?

What fields?

What authors?

How much material?

What is lacking in your reading?

When do I stop?

Literature Review

Here are some key steps in conducting a literature review:

- **Define your topic.** Do you have central question you want to answer?
- **Narrow down what you want to research** - a narrower topic allows you to focus more deeply, rather than skimming the surface
- **Divide your topic into key themes** to make it easier to look up information
- Use your books/articles/reports/papers to identify key authors or theories that relate to the themes and make them your starting point

Literature Review

- **Do the resources suggest any further reading?** If so, track it down
- Use UWS online library / Google Scholar etc to locate academic opinion and theory
- **Organise your literature:** store any paper copies in folders and files, grouped into themes
- Read the literature you have sourced
- **Fit the literature into the key themes you have identified** - if any don't fit, or they don't seem important enough to include, put them to one side

Literature Review

- You now need to engage critically with the texts
- Think about whether you agree with what's being said
- Examine the methodology used: divide the articles into **qualitative** or **quantitative** (or other) categories, evaluate conclusions made based on the method used and evidence presented

Literature Review

Once you start to collate your literature review,
**make sure to reference your sources correctly
as you use them**

Keep full details of the title of the paper or book chapter, the authors, the page numbers, the journal or book it was published in and year of publication, as it can be hard to track down these details later

Literature Review

- **It is important that you keep up with your subject**; people will be writing about it all the time, with new theories and literature produced
- This means you should look over literature at other points too: certainly mid-way through a research project and again at the end

Literature Review

Finding credible sources

*****Academic Journals** are the best because they have usually been peer reviewed

****Conference Papers/Book Chapters** can be useful but usually not as detailed or rigorous in being reviewed

****Books** can be useful but not “for dummies” type books

Literature Review

***? Trade Journals** - watch out for bias and sales pitches

****? Web Papers, Blogs** – watch out for bias, the credibility of author and whether it is just a meaningless, unsubstantiated ‘rant’

***? White papers (termed grey literature)** – complex issues presented in a concise manner – aimed at persuading - watch out for bias

Finding the Sources

Good starting point is the **UWS Library**

You should have an **Athens account**

Search Library's Electronic Databases

Look for databases in your subject area

Finding the Sources

<http://scholar.google.com/> may help track down papers

Well known and respected academics/authors may have their own **web sites and blogs** – maybe useful source of material and list of publications

Look at respected societies' web sites (e.g. British Computer Society etc) can have useful reports, briefing papers etc

Sometimes a **google search** of authors and subject areas can be useful – however does bring up a lot of 'junk' as well

Finding the Sources

Backward Searching

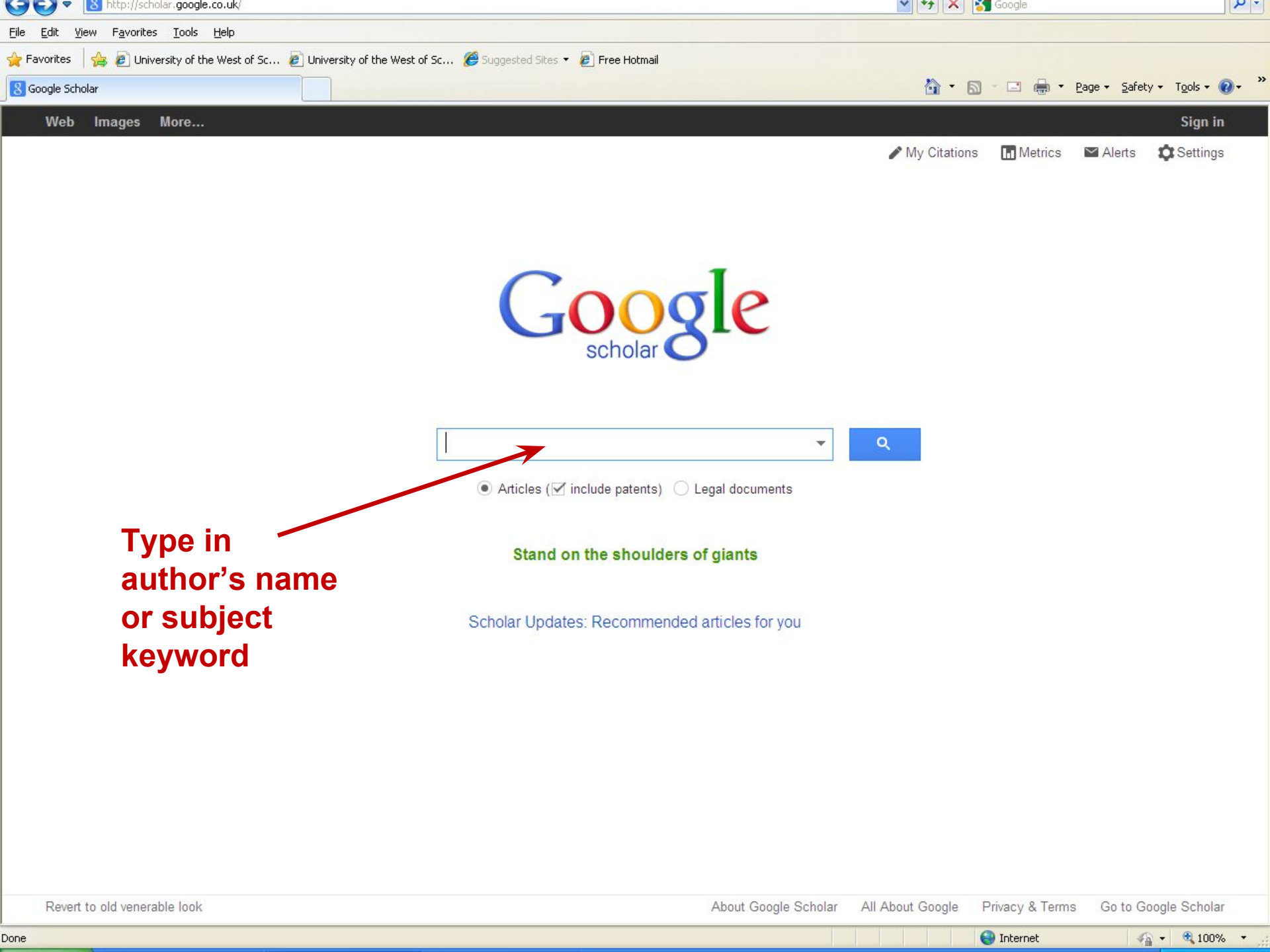
You can move backwards in time using an original article's bibliography or reference list

e.g. a 2011 paper makes reference to 2009, 2005 papers

Forward Searching

You can move forward in time using a **citation index** (e.g. from Google Scholar) – tells you other papers that reference the paper

e.g. a 2007 paper by author X is cited by a 2011 paper by author Y etc



Type in
author's name
or subject
keyword

Mark Stansfield - Google Scholar - Windows Internet Explorer

http://scholar.google.co.uk/scholar?hl=en&q=Mark+Stansfield&as_sdt=1%2C5&as_sdt=

Mark Stansfield - Google Scholar

Web Images More...

Google

Mark Stansfield

Scholar

About 7,620 results (0.09 sec)

My Citations

Articles

Legal documents

Any time

Since 2013

Since 2012

Since 2009

Custom range...

Sort by relevance

Sort by date

☒ include patents

☒ include citations

☒ Create alert

[PDF] [An Investigation into Issues Influencing the Use of the Internet and Electronic Commerce among Small-Medium Sized Enterprises.](#)

M Stansfield, K Grant - J. Electron. Commerce Res., 2003 - csulb.edu

ABSTRACT Since small-medium sized enterprises (SMEs) play a vital role within many major economies throughout the world, their ability to successfully adopt and utilize the Internet and electronic commerce is of prime importance in ensuring their stability and ...

Cited by 81 Related articles All 3 versions Cite More

[A quasi-experimental study of three online learning courses in computing](#)

TM Connolly, E MacArthur, M Stansfield... - Computers & ..., 2007 - Elsevier

This paper presents the results of a 3-year quasi-experimental study of three Masters courses in computing. The purpose of this study was to investigate the extent to which the teaching and learning of these courses were enhanced by being developed and delivered ...

Cited by 63 Related articles All 8 versions Cite

[An application of games-based learning within software engineering](#)

TM Connolly, M Stansfield... - British Journal of ..., 2007 - Wiley Online Library

Abstract For some time now, computer games have played an important role in both children and adults' leisure activities. While there has been much written on the negative aspects of computer games, it has also been recognised that they have potential advantages and ...

Cited by 60 Related articles All 7 versions Cite

[\[PDF\] Enhancing student performance in online learning and traditional face-to-face class de](#)

M Stansfield, E McLellan... - Journal of Information ..., 2004 - informingscience.org

Executive Summary Within many educational institutions across the world, the delivery of undergraduate and postgraduate courses is facilitated by online learning technologies. The development and transformation of traditional academic courses for online learning ...

Cited by 52 Related articles All 15 versions Cite More

[CITATION] Action research as a framework for IS research

F Stowell, D West, M Stansfield - Information Systems: an emerging ..., 1997 - McGraw-Hill

Cited by 45 Related articles Cite

[PDF] from csulb.edu Available online from UWS

Available online from UWS

Available online from UWS

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List of papers

Click on list of papers that have cited this reference

Filtering References

To help filter out the less valued references and focus on key papers:

Use **author's name** and journal title as indicator of quality – you should start to recognise well regarded authors

Use the **title**, **keywords** and **abstract** as a guide as to the relevance of the paper to your Hons Project

Skim read the paper, concentrating on the **abstract**, **introduction** and **conclusions** – helps identify those papers that might be worth reading in more detail

Taking Notes

Good note taking is a key skill of **good research**

It is surprising how difficult it can be in March to find a paper you remember reading in November!

Record information about a paper or report by selecting:

- **Keywords** (ones that mean something to you)
- A **mini-abstract** in your own words (a few sentences)

When you take notes, make sure that you **record at least enough information** to be able to put it in your references list when you need it

Critical Reading

It is important that you try and develop your ability to read and **evaluate critically** what the authors of papers are saying

As you read look for **alternative or conflicting opinions or arguments**

You may see '**schools of thought**' about an area

You may see certain **themes** appearing

You may see **issues and problem areas** being identified by various authors

Critical Reading

These opinions, arguments, schools of thought, themes, issues and problem areas can help you **structure, classify and present** the topics under discussion

It is worth trying to **record these now** as they will help you present a valid and interesting view of the field you are researching

This can help make your Hons Project a thought-provoking and interesting read

Critical Reading

Be careful not to jump to **criticise authors' work**

Take care to ensure that you have **not taken things out of context or not fully understood the area enough**

Make sure you have **enough evidence to justify and back up claims or criticisms**

It is useful to **look for other respected authors** who have criticised an area and then quote or make reference to them to justify and build up your argument

It is good to have opinions on an area – **but be able to justify them**

Dangers

There is a danger that you spend **too long trying to collect and read everything ever written** about your area that you never get on with your Hons Project!

Writing Up the Literature Review

The reader does not want a list of what each source says – they want to hear what you think are the important issues that are to be found in the literature

They are looking for you to present the **arguments** in a **sensible and well-structured way**

The structure should help them understand the **context** of your work as well as get a clear understanding of the **main points, issues, arguments, difficulties, opinions** etc

Writing Up the Literature Review

AVOID simply presenting a list of quotes (even if they are well referenced) with little to tie the contents of the quotes together

Instead try and **cluster** part of the literature review together under **headings** which relate to different **themes, issues** etc that you find in the literature

In this way you are picking out the **area(s)** that you think are important to **your Hons Project**

Writing Up the Literature Review

DO NOT cut and paste findings or other peoples' work into your Literature Review

Think of ways in which you can **present existing work**

For example you could use **tables** to compare and contrast certain key points or **diagrams** to illustrate concepts etc

Writing Up the Literature Review

As your knowledge and understanding of the area grows you might have to decide **what is irrelevant and leave aside materials** that you have spent time collecting and reading

The Literature Review is not completed until **right at the end of the Hons Project as new papers might appear that are important to your work**

The Literature Review is a **dynamic thing** that is **evolving over time**

Writing Up the Literature Review

- Make sure you **structure** your literature review in a way that is suitable to your Hons project
- Let **your voice** come through – show that you are understanding, evaluating and assessing the materials – giving your **informed opinion** is important

Ask yourself questions like:

1. What is the **specific argument, problem, or research question** that my literature review helps to define?
2. What **type** of literature review am I conducting? Am I looking at issues of theory? methodology? Technical detail? quantitative research? qualitative research?
3. What is the **scope** of my literature review? What types of publications am I using (e.g., journals, books, government documents, technical reports)? What discipline am I working in (e.g., computing, business, gaming)?

Ask yourself questions like:

4. How good was my **information seeking**? Has my search been wide enough to ensure I've found all the relevant material? Has it been narrow enough to exclude irrelevant material? Is the number of sources I've used appropriate for the length of my project?
5. Have I **critically analysed** the literature I use? Do I follow through a set of concepts and questions, comparing items to each other in the ways they deal with them? Instead of just listing and summarising items, do I assess them, discussing strengths and weaknesses?
6. Have I cited and discussed studies **contrary** to my perspective?
7. Will the reader find my literature review **relevant, appropriate, and useful**?

Common Mistakes

- A lack of clarity and structure
- Lots of pages of narrative but no references to authors or evidence to back up and justify points
- Lack of depth and focus
- Incorrect referencing style
- Unsubstantiated views and claims
- Lack of meaningful papers or evidence
- No clear message – too general and rambling
- Literature/technical review has little relevance to the proposed area of research
- Literature/technical review too short – just a few cut and paste diagrams that were not properly referenced
- Literature/technical review little more than just a list of bullet points

Literature / Technical Review

Can be worth anything from **10-25 marks** in the Hons Project marking scheme

Feeds into later chapters such as discussions/findings – affects marks here as well

Can be worth quite a lot of important marks

Important to get it right and do well

Referencing

See Handout on **Harvard Referencing** that you should follow very closely

See UWS Library Reference Guide:

http://moodle1819.uws.ac.uk/course/view.php?id=2269%22%20target%3D\%22_blank

You might lose marks if you do not use the correct referencing style