



COMPI205

Technical Report –Dr. Su White

Typical mistakes from previous students

General Rules

- Before any hand-in you should have made sure you
 - address all of the assessment criteria
- Writing is a craft
 - a good document will go through more than one revision
 - There is never a perfect solution to a written problem

Assessment criteria mistakes

Students often

- Fail to do one of the things you get marks for
- Appear to give more importance to some criteria than others

Possible reasons?

Rushed last
minute?

Lack of focus?

Blink panic?

No review of text

Last minute solution?

- Use your time strategically
 - What changes will get you more marks?
 - Look at the assessment criteria carefully
 - <http://edshare.soton.ac.uk/19129/18/COMPI205%20Technical%20report%20spec%20and%200criteria%20combined.pdf>

Review each assessment criteria

- Objectively analyse your likely score
- Or work out how to get some help with that task...
- Decide how you might change the work
- Evaluate how long that would take (how much effort)
- Review the total set of possible changes
- Make the most impactful effort



A new year's quiz

- What do students do wrong?

Abstract

Quality of the abstract

- The abstract should tell me
 - why I need to read this
 - what I will learn
 - the important conclusion
- It must be stand-alone.

Mistakes

- Confused and confusing
- Does not follow suggested formats
- Rambling
- Reason? Probably rushed or left 'til the last minute. Unlikely to have been reviewed.

Remember
your reader gets to the abstract first
it sets their expectations
make it good

Introduction

Quality of introduction:

- Tells me
 - what the question is
 - what is the state of the art is in the area
 - will reference current literature

Think scope and scale

Mistakes

- Repeats the abstract
- Does not communicate why the problem is important or interesting
- Does not indicate how big the problem is

Remember
the reader wants to be reassured that
you are competent
you have something interesting to say
Pay attention to how you write this section



Argument

Quality and clarity of argument /enjoyability

- Narrative/story ties the report together
- Makes even complex topics easier to understand.

Mistakes

- The story is difficult to find
- The writing has not been structured

Remember

Introduce each new idea with a new paragraph
Use sub headings to structure your work
Tables and diagrams can be used to explain structure
and make complex problems easier to understand



Overall analysis and conclusions

Quality of overall analysis and conclusions

- Summarizes and analyzes what has been learned
 - in order to synthesize and address answers to the questions asked in the introduction.
- Discuss limitations of report /possibly suggesting further work.

Mistakes

- The text is descriptive rather than analytical
- No effort is made to discuss limitation of report

Remember

You need to give yourself time to reflect on what you have investigated
this will help you understand the limitations of your report,
Explain conclusions with recommendations or suggested further work
Wordless recreation can be valuable here
make thinking time

Literature

Quality of cited literature

- Ideally peer-reviewed,
 - appropriately up-to-date.
- Footnotes for refs. to material which might change e.g. websites

Mistakes

- Only/mostly references from web sites are used
- The literature is based on a few texts and mostly out of date

Remember

You will never cite every reference you look at
Some references tell you what to leave out
References will support your arguments
Don't make claims which are not backed up

Structure and appearance

Structure and appearance of report

- Excellent appearance.
- Strong structure of main sections, well laid out.
- Clearly structured and logical
- Good/relevant diagrams/illustrations.

mistakes

- The work is badly formatted
- Pasted in text uses different fonts
- Diagrams and tables do not have labels
- Spelling mistakes and visually a mess

Remember

Allow sufficient time to review formatting

These are easy marks



Readability

Readability

- how easy is it to read and understand this report?

Mistakes

- Poor grammar
- Words missing, the argument leaps around a lot

Remember

Proof reading by others & reading aloud can help spot confusion (e.g. text to speech)

You need time to correct this
make sure you schedule that time

References

References:

- Correct use of citations/ references
- Adheres to Harvard convention (Name, Date)

Mistakes

- Students use number formats
- Students use a mix of formats

Remember

University Library notes provide guidance
Cite them right can check text for you
References are used to find a copy of the source
make them complete



Academic Integrity

Quality of academic integrity and originality

Mistakes

- Notes don't get turned into final version
- Over reliance on direct quotes
- Panic cut and paste from many sources

Remember

We are hoping this will not be a problem
You have had a chance to see typical mistakes
Trust yourself to use your own writing
better learn how you need to improve you writing
than be penalised for poor academic integrity

Things you must do

- Include
 - academic integrity statement
 - the summary of your brief
- These go between the title page and the abstract
- Best start the abstract on a new page – we have a word limit not a page limit
- You must use the template provided – this is a professional development class. You are expected to demonstrate that you can use Word, since it is the the common business program



Academic Integrity Statement

- Include on the page after your title page

Acknowledgements

- Don't include unless you have something to acknowledge

Word Limit

- Do not exceed the word limit
- You will have to trim what you have written
 - This means you have to have a fair draft well before the actual deadline!
 - A second pair of eyes can help you find ways to shorten and ways to clarify
- Friends or peers are good make good proof readers
- You can learn how to write better by reading other people's work
- Sometimes a good diagram can save you lots of words
 - Use a diagram to
 - summarise a set of relationships
 - Provide some insights

Reminders

- The material which follows has appeared in previous lectures

We have had the theory...

Lets imagine the process 😊

Electronics and
Computer Science


UNIVERSITY OF
Southampton

Technical writing

Lectures 9-10, 26.10.2015

Elena Simperl

Professional Development (COMP1205)



<http://www.edshare.soton.ac.uk/15350/>

Electronics and
Computer Science


UNIVERSITY OF
Southampton

Reproduction literacy & academic integrity

Lectures 5-6, 12.10.2015

Elena Simperl

Professional Development (COMP1205)



<http://www.edshare.soton.ac.uk/15127/>

What do you want to learn today?

Think about how you write:

- What can you already do well which will be useful?
- Where are your weaknesses?

Based on this reflection



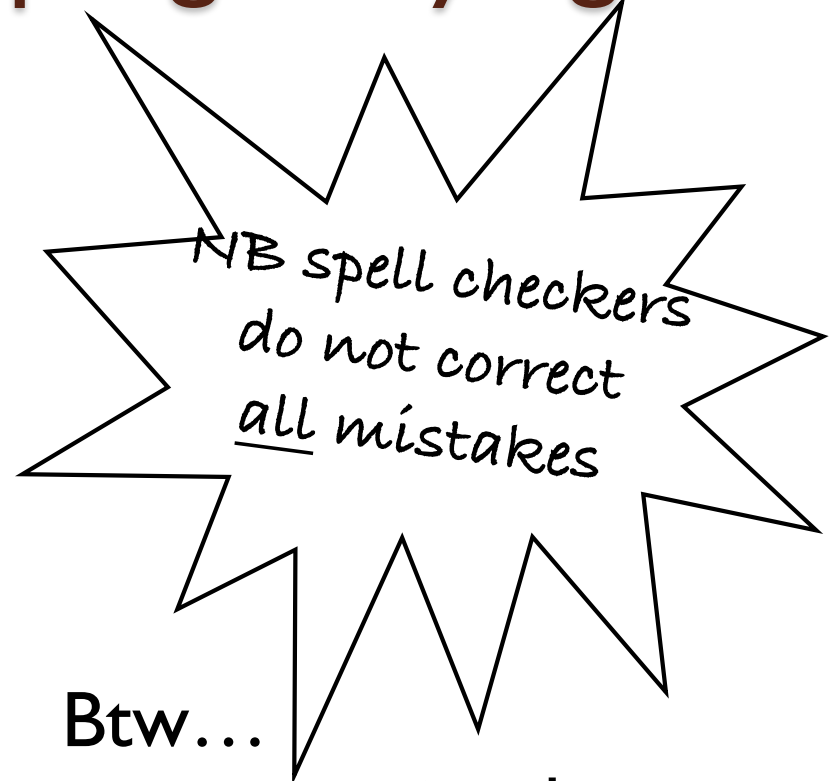
write down **three** things you would like to get out of the session today

You need to learn how to...

- Organise writing clearly and logically
- Handle evidence appropriately in writing to present a structured and logical argument
- Explain concepts in formal context
- Structure your work for correctly for the appropriate audience
- Understand strategies for revision at the document, paragraph and sentence levels
- Understand grammatical and stylistic usage
- Be able to edit and refine your own written work

Sum wonderful peeeple gt evrytng write 1st thyme

- This information/class is not for you!!
- But you may be able to help your friends and colleagues
- You may learn from helping them



Btw...
can you write down
the correct version of
my heading?

Think about the process and purpose of writing

Two minutes:

What is the purpose of

- writing the technical report
 - in this module
- writing reports
 - as part of your degree
- writing
 - in a professional context

Includes:

- Learning how to write (and practicing)
- Recording a process for 'reproduction'
- Demonstrating knowledge, skills and understanding
- Communicating scientific or technical findings/discoveries/insights

Look at the technical report spec'

COMP1205 Technical Report - specification

Rationale

Reports are one of the most common and important technical documents in the workplace. Reports provide information and recommendations in order to help organizations solve problems or achieve goals. A well-designed and written technical report is informative and persuasive, often to multiple audiences.

Assignment

You will each be individually allocated a specific scenario from the set below on which to write a 2002 word technical report.

Read the brief carefully to understand the extent of the brief. Make a note of all the requirements. Before you hand in your work, double check you have addressed all the requirements: brief; formatting; academic integrity; references/citations.

Topics:

Anonymity, Privacy and Security

1. Your boss has been looking at guidance from the British Standards Institute which provides guidance on good practice to ensure compliance with the Data Protection Act. As a consequence they have become interested in security issues, particularly in relation to anonymity of communications on the internet. They have asked you to find out for them how you can achieve anonymity in communications on the internet. How would it be useful to the company? Could it be a way of securing more private communications, or could it be a device to which supports industrial espionage and other abuse of the company computing resources by dishonest employees? They ask

<http://www.edshare.soton.ac.uk/14582/>

COMP1205_Technical_Report_Specification.pdf
PDF

Download

Dr Su White saw@ecs.soton.ac.uk

COMP1205

<http://www.edshare.soton.ac.uk/15567/>

Look at the mark scheme

Technical Report Marking Scheme						
	A 1st	B 2:1	C 2:2	D 3rd	Fail	MARK
Structure and appearance of report what the report looks like conforms to expectations/specifications	Excellent clear presentation. Strong structure of main sections, well laid-out. Clear structured and logical. Good diagrams/illustrations.	Good presentation. Clear layout, some diagrams, adequately annotated, addresses topic in a logical/structured manner.	Acceptable presentation. Main sections have some structure. Could do better diagrams. Not used template properly.	Disorganised presentation. Un satisfactory structure. Poor labeling of or no diagrams. Overall looks structure.	Poor presentation. No obvious structure, difficult to work out what is where. Failed to use template.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Readability how easy it is to read and understand this report	Meaning clear and fluent, originality in expression, logical progression and perfect English.	Meaning clear and logical Good English.	Meaning and text quite clear, Some faults in English.	Meaning and text fairly not always clear and does not always make the point. Poor English in some places.	It was difficult to read this - perhaps because it was lacking in logical progression or the English was seriously bad.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Quality of the abstract The abstract should tell me why I need to read this, what I will learn and tell me the important conclusion it must be stand-alone.	Well-written Abstract. After reading this I am quite clear why I need to read the report, what I am going to find out in the report and what the important conclusion will be. No citations in the abstract.	Good Abstract. After reading this I am really clear why I need to read the report, what I am going to find out in the report and what the important conclusion will be. No citations in the abstract.	Fair abstract, although after reading it I am not fully clear why I need to read the report, what I am going to find out in the report and what the important conclusion will be. The abstract is not stand-alone (eg has citations).	An attempt at an Abstract. Fails to make it clear why I need to read the report, what I am going to find out in the report and what the important conclusion will be. May not be stand-alone - maybe too long or too short.	After reading this I am little the wiser than I was from reading the title of the report. Maybe much too long or much too short.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Quality of Introduction tells me what the question is, what is the state of the art in the area and should reference current literature.	Good introduction, covers questions raised in the set topic. Interesting/comprehensive background and state of the art, demonstrating background reading/research.	Appropriate introduction, with fair explanation of questions the report will answer. Good coverage of state of the art and background information on the topic.	Adequate introduction, although not quite clear what question report will answer. Adequate coverage of background information.	Some attempt at an introduction; background information and relevance for the topic of the project, but not in an appropriate level.	Inadequate introduction, little if any evidence of background reading.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Quality and clarity of argument enjoyability good non-convoluted that ties the report together making even complex topics easier to understand.	Discussion shows depth of analysis, explanation and synthesis of information, not superficial reporting of facts.	Good narrative and discussion with some analysis and synthesis.	Discussion demonstrates basic understanding, but limited to a factual account only, with little discussion or analysis.	Superficial reporting, no demonstration of in-depth understanding of topic.	Lack of evidence that student has understood the information, with a tendency to regurgitate facts. Poor discussion.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Quality of overall analysis and conclusions summarises analyses what has been learned in order to synthesize and address answers to the questions asked in the introduction, discuss limitations of report (possibly suggest further work).	Conclusion shows good integrations of introduction and discussions, introduces issues for further exploration. Shows awareness of limitations of report.	Relevant issues and problems identified and discussed with some analysis good summary or lessons learned. Good conclusion demonstrates authority. Possibly over confident in answer.	Some relevant issues are identified and discussed, shows comprehension, no significant errors or omissions, some conclusions drawn. Conclusion does not raise issues for further exploration.	Superficial relevance and limited comprehension, error in judgments and misleading summary. Weak conclusion.	No more than a summary of what has already been said.	10%
50%	7-10	6-7	5-6	4-5	3-5	
Quality of cited literature ideally peer-reviewed, appropriately up-to-date, references to material which	Wide range of recent sources of literature listed using primary literature mostly from credible peer reviewed	Good range of recent literature and sources - the majority from peer reviewed and primary sources	Fair number of references although they are mostly not primary sources or peer reviewed	Few sources referenced, only basic texts on a restricted range of subjects. Many are not from peer-reviewed	Limited referencing. The few that are there are simply websites and secondary sources.	

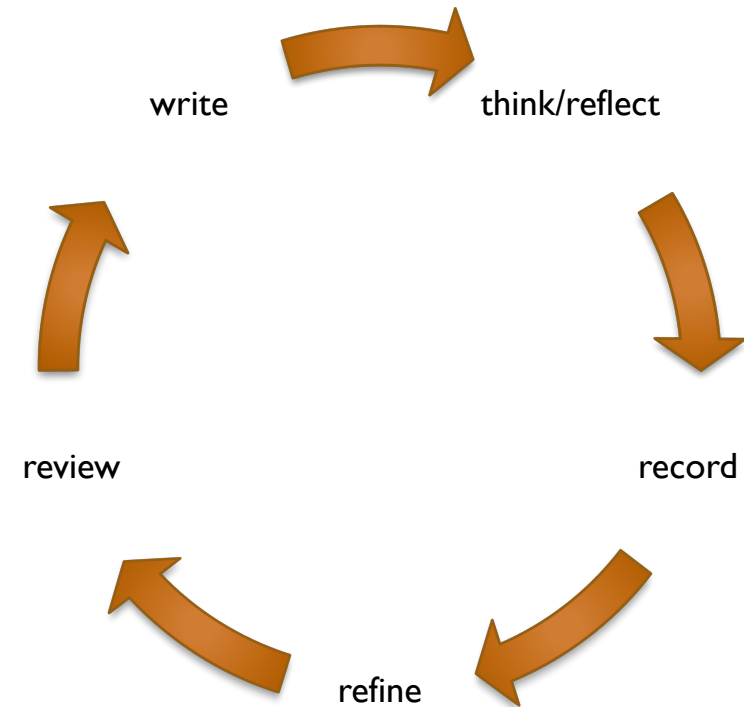
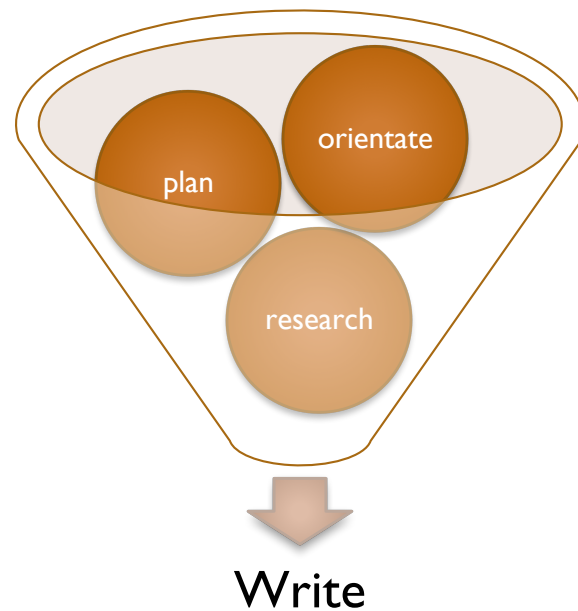
<http://www.edshare.soton.ac.uk/15362/>

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COMPI205

<http://www.edshare.soton.ac.uk/15567/>

The process – and pragmatics




Your first draft will never be good enough to hand in!

Always hand in before the deadline

Before Getting Started

- You wish to communicate “What you have found out”. If you didn’t find anything out : STOP!
- Usually technical reports are intended to communicate new knowledge
“I had this hypothesis and I tested it like this; here are my results and this is what we learn from them”
- BUT as a student
you are asked to write technical reports about things that you know that the person who reads it (the marker) will already know. Don’t worry – your marker is not your audience (see later) – and your task is still to express what *you* found out.



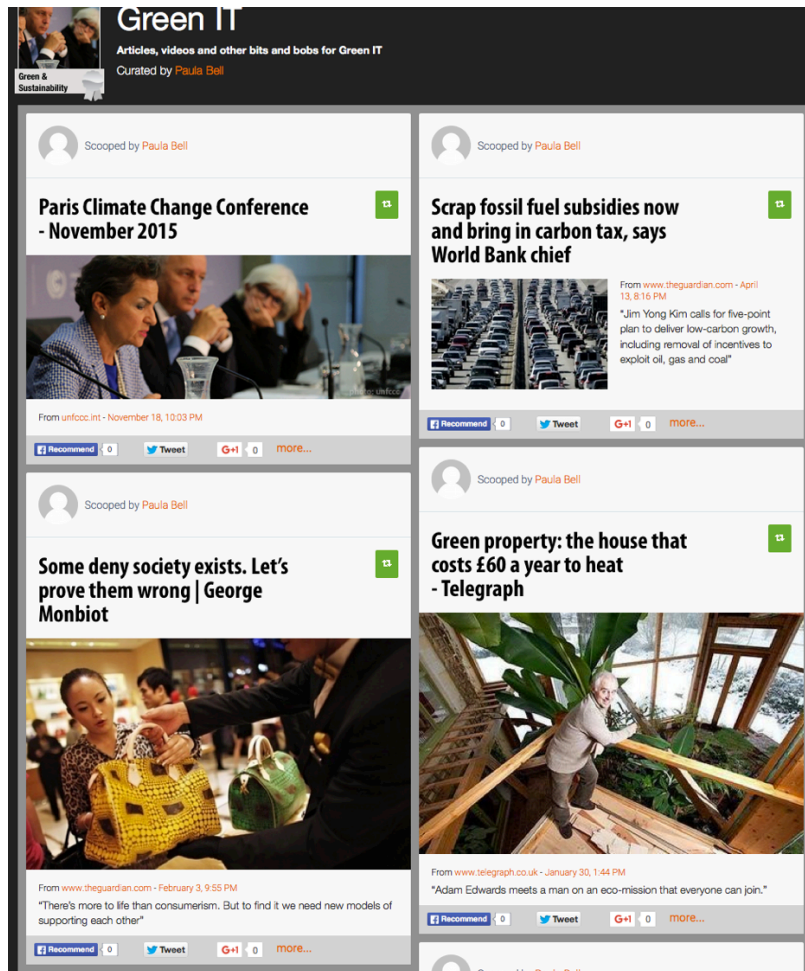
Use the process to learn about yourself

- How do you think and learn?

How can you refine what you do?:

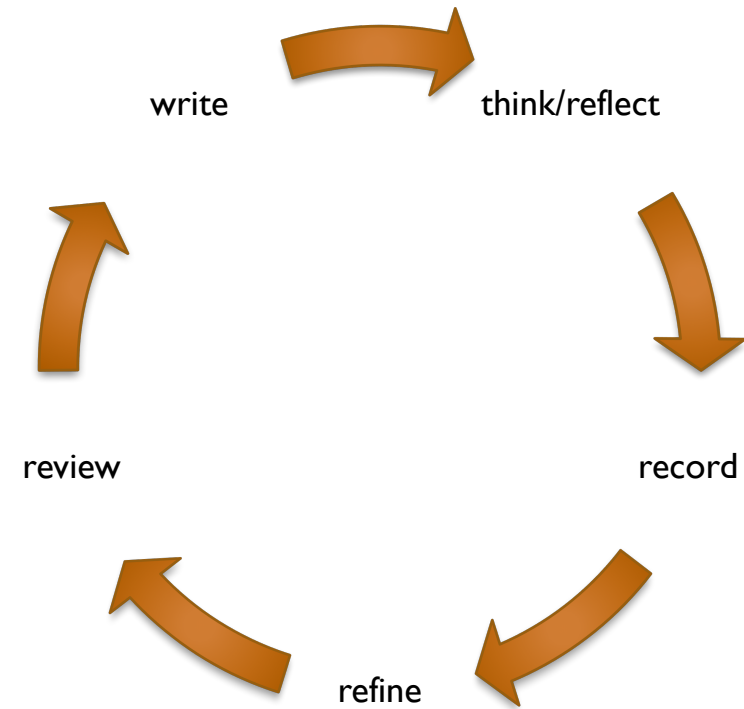
- To work **smarter** not harder

Working collaboratively can be more fun/productive...



- But write your report individually
- Find your own words
- Select your quotes – and cite them accurately

Bear in mind existing guidance



What we know about plagiarism

- People who are rushed:
 - Take shortcuts
 - May feel panicked
 - May not make good decisions
- ...how to avoid it
 - Carve our enough time
 - Add a buffer for the unexpected

Advice includes

- Set aside time for research and writing
- challenge common assumptions
- overcome procrastination
- eliminate distractions
- use a timer
- set SMART goals
- chunk your project into small tasks
- track your progress
- make yourself accountable



Reports are not personal



One time, i thought i would write a mystery novel. In the novel, there would be a murder and all kinds of people would try to figure out who did it. At the end, you would find out that the narrator of the book did it.

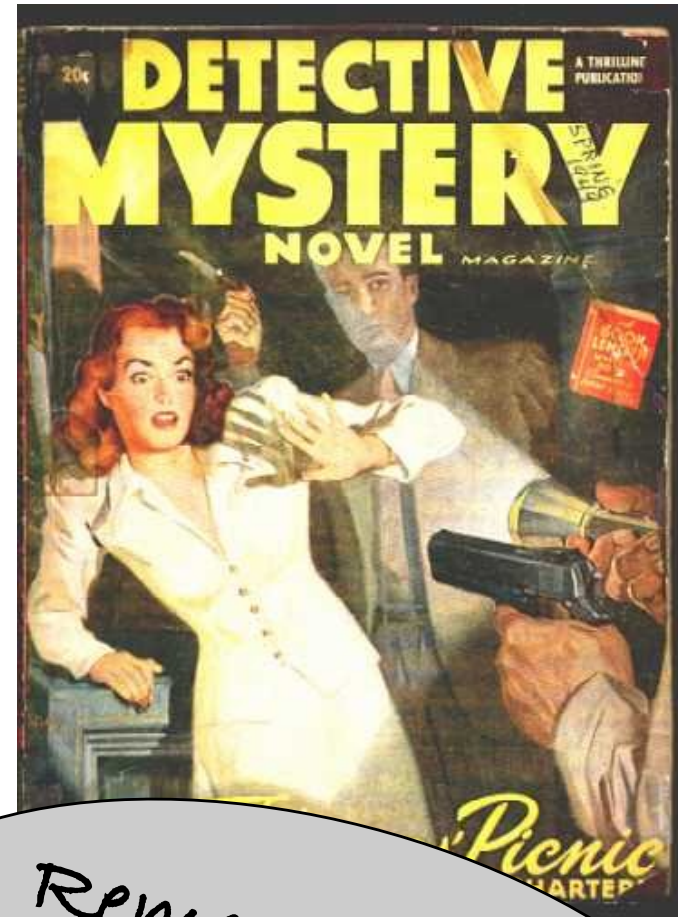
Then i figured someone probably did that already, and i remembered that i am an awful writer and i really hate mysteries.

Structure of a Technical Report

- **[Title page]**
 - name, affiliation, date, contact details, etc.
- **[Declaration]**
 - who did this work?
- **[Acknowledgement]**
 - to those who have helped or influenced your work
- **[Contents]**
 - sections, sub sections and page numbers (probably not sub sub sections)
- **Abstract**
 - stand-alone summary of report
- **Introduction**
 - provides the motivation and context and outlines other related work
- **Main technical sections**
 - theory, experimental method, results, discussion
- **Conclusions**
 - and appropriate future work
- **References**
- **[Web References]**
- **[Bibliography]**
- **[Appendices]**
 - anything which would interfere with the continuity of the main report (typically detail)

Report function

- Abstract summarises the work presented
- Introduction (provides context)
- Itemise the key work(s)
- Identify where your contribution fits
- Present key ideas, describe methods
- Present Results
- Draw Conclusions



Remember Your
report is not a
detective novel!

The Abstract

- must be stand-alone
- must not contain citations
- is a concise summary – not a précis.
- **IS VERY IMPORTANT**

Use four or five sentences.

1. What is the problem, and why is it a problem?
2. What is your idea for a suggested solution?
3. How did test your idea?
4. What results did you get?
5. Why is that useful?

It's a good idea to write the abstract before you begin (even if you re-write it after you finish)

ABSTRACT

Although the cloud of Linked Open Data has been growing continuously for several years, little is known about the particular features of linked data usage. Motivating why it is important to understand the usage of Linked Data, we describe typical linked data usage scenarios and contrast the so derived requirement with conventional server access analysis. Then, we report on usage patterns found through an in-depth analysis of access logs of four popular LOD datasets. Eventually, based on the usage patterns we found in the analysis, we propose metrics for assessing Linked Data usage from the human and the machine perspective, taking into account different agent types and resource representations.

Experimental Report Abstract

Tea drinkers report major differences in their satisfaction with cups of tea, even when they have been made from the same tea leaves.

One possible cause of this variability is the temperature of the water at the time it is poured over the tea leaves.

This report describes an experiment in which one hundred tea drinkers were asked their views on teas made with water at different temperatures.

The results demonstrate a significant preference for tea made with near boiling water.

The perceived quality of tea, particularly in the USA, would be much enhanced if caterers observed this convention.

- (5 sentences, 98 words)

Work and improve over time

- Have a plan
- Do good work
- Record your work
- Analyse the results
- Capture the whole process
- Meet your deadlines

Some aspects will apply equally to:

- Every written task

Use opportunities to refine your process

these are skills for life

Record an Audit Trail

References

- Provide an audit trail
- Acknowledge others' work
- Are concise

Should be replicable

List references

- consistently,
- correctly,
- completely

They need to be:

complete and in a standard format

They need to contain:

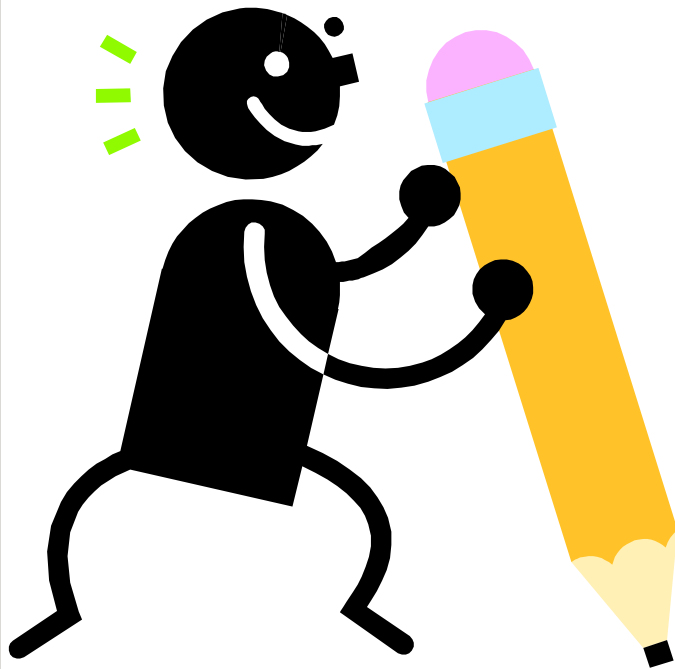
enough detail to locate the same source again

Do not include:

ISBN

Library call numbers

Work smarter not harder



One touch

- Write your bibliography as you go
- Always get full references
- Record how and when
- Collect to a standard format

Information needed

- Gather information before *and* during writing
- Begin to organise information as you obtain it
- Information from others:
record full bibliographic details
- Information you generate:
keep a complete logbook record

Keep track of your sources



Avoid plagiarism

With notes, copies of articles, useful diagrams, etc.,

NB

- Authors, complete name of work, editors if any, publisher, year/month of publication, volume no., page numbers
- URL plus any clues as to original paper source.
- If class notes, is there a printed textbook?
- If a self-contained paper, look for any and all clues to find the original citation (e.g. author's publication list on Web page).