

Higher Education Language & Presentation Support

Critical Thinking & Writing

- To appreciate the relevance of critical reading & thinking and writing
- To understand the necessary requirements or elements for critical writing
- To review the language of critical writing

Learning Objectives

What is your understanding of the following words in the academic context?

- critical
- analyse
- argument

Write down your definition of each of these words.

Review your definitions at the end of this workshop to determine if you have gained a new/deeper understanding.

Questions...

What is critical thinking?

Critical thinking skills are paramount to your university studies. They are also skills that students tend to struggle with, in terms of ‘what critical thinking means’ and ‘how to employ’ these skills to their studies and academic writing.

Critical Thinking



(Brown 2009; Johnson & Briggs 2008)

What do you see?



(Brown 2009; Johnson & Briggs 2008)

(Cushing 2007; Lee 2001)

(business.org 2008)

Has your understanding grown?

(Brown 2009; Johnson & Briggs 2008)
(Cushing 2007; Lee 2001)
(www.business.org 2008)

(Zhu, 2006)
(Munster & Gostardt 2007)



Gaining More Knowledge...

Who generally agrees:
(Brown 2009)
(Johnson & Briggs 2008)
(Cushing 2007; Lee 2001)
(www.business.org 2008)
(Zhu 2006)

Who disagrees to some
extent:
(Munster & Gostardt 2007)
(Pitcher et al. 2008)
(Kelso & Raye 2005, p. 8)

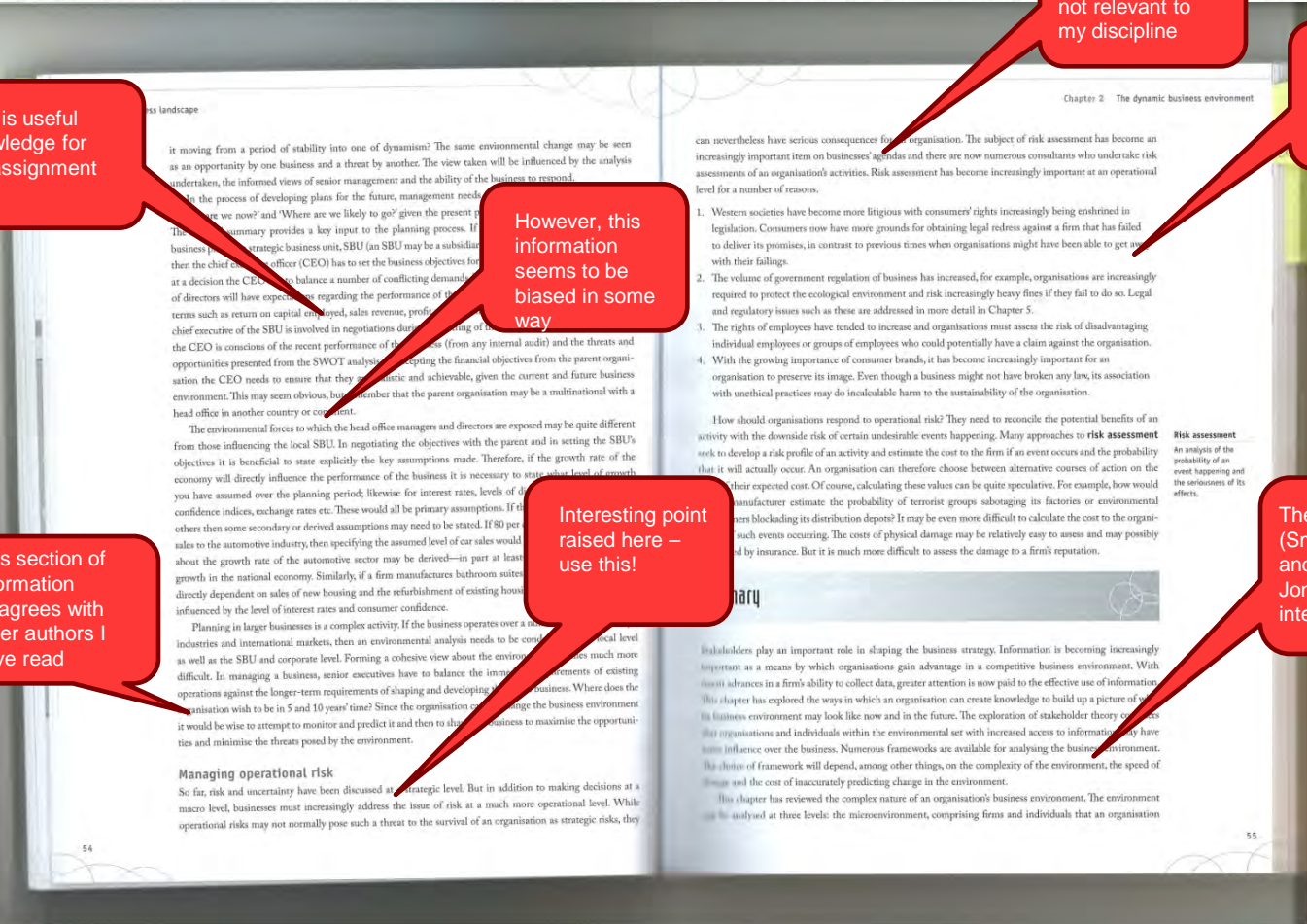




Who generally agrees:
(Brown 2009)
(Johnson & Briggs 2008)
(Cushing 2007; Lee 2001)
(business.org, 2008)
(Zhu 2006)
(Peterson 2010)

Who disagrees to some extent:
(Munster & Gostardt 2007)
(Pitcher et al. 2008)
(Kelso & Raye 2005, p. 8)
(Valhalla & Myer 2009)
(ABS.gov.au 2010)

The Whole Picture



Engage with the texts

To be critical does not mean to be negative; it means to analyse and evaluate ideas and evidence.

Critical thinking is taking nothing for granted.

As a university student, you are expected to **examine, question, investigate, find support, as well as uncover academic counter arguments with ideas, concepts, questions and theories** that you will encounter in your subjects, and not just accept them on face value in a rather passive un-enquiring manner.

It is essentially developing a detective-like mind.

- **What is critical reading?**
- Read widely including (especially) authors with opposing views.
- Question the information in the texts you are reading. Analyse what you read (break what you read into its most pertinent parts):
- Identify the main points and themes of the text you are reading
- How does this information fit in with the other information I know about this subject? Is it of the same opinion or countering it? How does it fit in the big picture of what I'm learning/writing about? What else feeds into it?

- Think about what aspects of the issue the author has not dealt with in their argument that you think are relevant
- Evaluate the claims and evidence in the text

- Engaging active thinking processes:
Be engaged with the material you are reading, ask questions about it as you read, don't accept it on face value, what else have you read that supports it/disagrees with it?
- Asking questions about the material, i.e. the article, report etc. you are reading:
 - Is the information current?
 - Is there enough research backing up the evidence?
 - Does the writer have a particular agenda that they are pushing? (Bias)
 - Is this peer reviewed data/information?

Critical Thinking Process

- Evaluating the information you are exposed to:

- **Overgeneralisations and assumptions**
- Researchers often make simplifying assumptions when tackling a complex problem. While the results might provide some insight, these answers will also likely have some limitations.
- **Example:**

Students responded well to the teaching strategy and measures of performance and motivation showed significant improvements. *These improvements may in part be the result of the small class sizes in the study and may not necessarily occur in larger mixed ability classes.*

Example 1

- **Methodological limitations**
- Researchers may simplify the conditions under which an experiment occurs, compared to the real world, in order to be able to more easily investigate what is going on.

While studies by Smith (1999), Brown (2000) and Green (2003) generally claim that women are superior to men at understanding body language, Wright (1998) has found no difference. Furthermore, methodological problems raise questions about the positive results. For example, Brown's (2000) work looked solely at facial expressions asking participants to make judgements by looking at photographs. Whether these findings would be valid in real-life situations was not explored

Example 2

- **Objectivity of research**
- Some research may be biased in its structure.
- **Example:**

These findings suggest that property developers are primarily concerned with land use issues, however, this may be more a reflection of the questions participants in the survey were asked than it was a reflection of their primary concerns since no open ended questions were asked.

Example 3

- **Limitations due to sample group**
- Limitations can arise due to participant numbers. **Example:**

- The fact that 80% of students were satisfied with this mode of teaching is significant, however it is important to note that only 20 of the 150 students in the class completed the questionnaire.

- Limitations can also arise if there is a limited range of participants. **Example:**

The study found that the average height of an adult male was 1.8 metres, however this is questionable data as the sample for this study was taken at the local basketball court.

Example 4

What (critically analytical) questions would you ask about the following statement?

“In the reading test, the five children who were taught to read using phonics performed better overall than the five children taught using the whole word method. This shows that the phonics method is a better choice for schools.”

Source: Wallace, M. & Wray, A. 2006 'Chapter 1: What It Means to Be Critical' in *Critical Reading & Writing for Postgraduates*. Thousand Oaks, California p.5

Critical Reading

- Synthesising with other thinkers/concepts:
What other thinkers agree on this topic? What are some of the counter arguments against it? Who has other ideas that feed in/support or negate these concepts?
- Thinking of your own standpoint:
How do I feel about this information? How do I know that this information is not being subjective? How do I know that this is reliable information? What does my own background experience lead me to believe on this subject?

• **What is critical writing?**

- Integrating ideas and arguments from a range of authors and readings in your writing
- Making comparisons and contrasts between the different texts you have read and arguments you have found
- Forming your own opinion or a position about what you have read
- Gathering appropriate referenced evidence and examples to support your position
- Writing critically – incorporating different voices

So... What is 'an argument'?

An argument is a logically connected series of reasons, statements, or facts (i.e. evidence) used to support, establish, or oppose a point of view (i.e. claim) (Huth 1990, p. 56), with the aim of persuading the reader to accept the claim as true and/or undertake some action.

Arguments

How to develop an analytical structure:

- decide what your conclusion will be i.e. what position you take
- come up with the premises/research/evidence that either explain how that conclusion comes about, or show why it should be accepted
- use connectors to show the relationships between the premises
- stop and think: am I missing any premises (claims; arguments; evidence) ? do I need more premises? have I shown the relationships the way I want them to be?

We use language to build and strengthen our arguments through: there are two basic building blocks we utilise when exhibiting critical thinking in our academic writing:

- Key words and concepts repeated and added in a logical sequence;
- Connectors (transitional words and phrases) that establish relationships such as addition, contrast, comparison, causation.

Features of arguments

In the late 1990s, several factors led to a reduction in community nursing services: **cuts in government funding, changes in societal attitudes, and the new market economy.**

In the mid-1990s, the government was influenced by the model of the **new market economy** *and* sought a rationale for **cutting its funding** of social programs. *Thus*, it took advantage of a recent hardening of **societal attitudes** to accelerate its cuts to these services. *As a result*, **community nursing services** were cut by 10% in 1998, *as compared with* a 5% cut in 1997.

- further
 - in particular
 - however,
 - despite
 - Thus
-
- You will see these connectors in a paragraph. What relationship do these indicate between sentences?

Features of arguments

Many studies (references) have shown that **air pollution** has negative effects on human health. *Further*, knowledge is growing about the composition of **air pollution**, mechanics of toxicity and susceptible populations. *In particular*, a number of recent studies (references) have focused on the effects of **fine particulates and ozone**. *However*, no research has been conducted to link **fine particulates and ozone** with the **autonomic regulation of the heart**, *despite* clinical evidence that such a link might exist. *Thus*, this study was designed to explore the mechanisms of which **fine particulates and ozone** might interfere with **autonomic regulation of the heart**.

With **critical writing** you are participating in an academic discussion that is some ways a debate. This can be more challenging and risky. You need to weigh up the evidence and arguments of others, and to contribute your own.

Critical Writing

- Now you try

Analysing a critical text

To write critically you will need to:

- analyse the assignment topic
- know what the lecturer is looking for
- think about why the topic is worth writing about – its significance
- work out what sort of critical thinking is involved – comparing and contrasting? problem solving? identifying cause and effect? analysing and evaluating?
- consider the quality of the evidence and argument you have read;
- assess their relevance and usefulness to the debate that you are engaging in for your assignment;
- look at both sides of an argument
- identify how best they can be integrated into the argument that you are developing;
- make sure everything you say is backed up by evidence and references;
- link what you are saying to the overall assignment topic

String together quotes

You may feel that the more quotes you include, the stronger your argument. However it is important, to interpret the quotes to the reader, and to explain their relevance, discuss their validity, and show how they relate to other evidence.

Try not to

Strategically use paragraphs

You may wish to consider each paragraph almost as an essay in miniature. Within each paragraph you would:

- make the point,
- explain the point
- support the point (evidence)
- reflect critically on the point (your voice)
- link it back to the question

Try to

What's the easiest way to add your own critical voice?

If a reference is worth including, it's worth telling us why

When you include some evidence is relevant to your argument, explain why it is relevant and what this evidence contributes to the argument you are making.

Do not assume that the reader will be following the same logic as you.

Always remember

Is my conclusion supported by my preceding analysis and argument?

- Check out the conclusions that you have drawn, then locate and check the supporting evidence you provided earlier on. Check that the conclusions make sense, rather than being unsubstantiated or unconvincing

Tips

Allen, M. 1997, *Smart thinking: skills for critical understanding and writing*, Oxford University Press, South Melbourne.

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Butterworth, J. & Thwaites, G. 2008, *Thinking skills*, Cambridge University Press, Cambridge.

Cottrell, S. 2011, *Critical thinking skills: developing effective analysis and argument*, 2nd edn, Palgrave MacMillan, Hampshire, UK.

Taylor, D.B. 2013, *Writing skills for nursing and midwifery students*, Sage Publications, London.

References

- Weekly workshops
- Drop-in consultations
- Individual consultations by referral
- Writing clinics
- Conversations@UTS
- Intensive academic English programs
- Self-help learning resources

HELPS services

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