



Critical thinking

Reading, writing.

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Critical Thinking

Critical thinking is the art of making clear, reasoned judgements based on interpreting, understanding, applying and synthesising evidence gathered from observation, reading and experimentation.

Burns, T. & Sinfield, S. (2016) Essential Study Skills: The Complete Guide to Success at University (4th ed.) London: SAGE, p94.

The word 'critical' in academia describes your attitude when reading an article/chapter/considering evidence or argument

- Being critical means weighing up the arguments for and against a particular point.
- Taking a questioning and inquisitive attitude
- Not accepting everything you read, looking for other 'scholarly' pieces that take a different position

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What gets in the way of good critical thinking?

IDENTITY – sometimes people are afraid to engage with things that challenge their sense of self. We might believe we aren't clever enough to deal with difficult and complex points of view.

EMOTION – people may have a negative emotional response to what they understand by being 'critical' or you may be in a heightened emotional state that clouds your judgement

MOTIVATION – we don't see a need, or are dismissive of the requirements



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What gets in the way of good critical thinking?

KNOWLEDGE – we don't understand what is expected of us

BEHAVIOUR – pure habit and lack of practice in thinking in a systematic way

COGNITIVE – weaknesses in certain skills such as structuring, sequencing, focusing on fine detail or categorising

METACOGNITIVE – not able to think about thinking. Honest critical reflection can be really challenging – not recognising bias, or seeking to confirm our own opinions



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Critical thinking is always

Persistent – constantly reviewing the evidence

Sceptical – when you are listening/reading

- *Always ask*
 - *Why am I being told this?*
 - *Who is telling me? (vested interest / bias)*
 - *What am I not being told?*
 - *Where's the evidence to support this?*
 - *How much of this is rhetoric (persuasion)?*
 - *How else might you read the same data?*
 - *What are the implications?*

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Critical thinking requirements in academia

To think critically, one must ...

- (a) “clearly state and comprehensively describe the issue or problem”,
- (b) “independently interpret and evaluate sources”,
- (c) “thoroughly analyze assumptions behind and context of your own or others’ ideas”,
- (d) “argue a complex position and one that takes counter-arguments into account,” and
- (e) “arrive at logical and well informed conclusions”. (<https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-critical-thinking>)

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As a process

This means

- Stepping back from immediate personal feelings
- Identifying other people's positions, arguments and conclusions
- Evaluating the accuracy of information
- Checking the logic of the argument
- Being able to read between the lines
- Look for flaws
- Check statistics
- Reach an informed conclusion

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In practice this looks like

You are reading about 'theory A'.

Is theory A a widely supported theory in the discipline area it is found within?

Do other theories agree with or add to theory A?

Do other theoretical points of view disagree with theory A?

What are the limits of theory A? (This could be about how applicable it is, whether other theories disagree, if it is usable in only one context etc)

What evidence supports theory A? What evidence is missing (could be found in the future)?

What evidence does not support theory A?

Task: have you read about a theory recently? What was it? Can you apply the questions above to the theory? Do you have answers to them?

(<https://subjectguides.york.ac.uk/critical/thinking>)

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In practice this looks like

A fellow student makes a statement in a seminar/tutorial/problem class/lab:

What evidence are they basing their statement on?

Are there objections, based on evidence, to the statement?

What theory/framework/idea is the statement based on?

What implications does the statement have? Are they credible?

What do you think of the statement? Why do you think this?

If you don't know what to think, how can you find information that will help you to form a view?

Task: What statement have you heard recently from a fellow student that you can apply these questions to?

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Developing your critical thinking

Join a study group – explore your understanding of topics, what are your differences? Talking about a topic can help develop your arguments

Swap coursework with a classmate and critically evaluate each other arguments, use of evidence and conclusions

Accept that criticism and disagreement are not the same as conflict. It is ok to hold different views. New knowledge can stem from respectful disagreement with others

Get involved in class discussions

Let your lecturers or instructors know if you have an issue or need clarification on feedback (if you agree, disagree or want to know more)

Engage critically with course content to go beyond a basic understanding

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Be able to recognise fallacies

Fallacies are defects that weaken arguments.

Fallacious arguments are very, very common and can be quite persuasive, at least to the causal reader or listener. You can find dozens of examples of fallacious reasoning on social media

Follow up: <https://research.com/research/logical-fallacies-examples>



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Sources

What is an informed source?

- Sources must be qualified to make the statements they make. (teachers about schools, mechanics about cars)
- Informed source may not always be the most obvious – who knows more about college life, lecturers? Admins? Students?
- Not all authorities are necessarily informed on everything they offer an opinion about, just because they have the letters PhD does not mean they are qualified on every topic – examine their background



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Remember

Independence and impartiality are not always easy to judge

- Be sure your sources are genuinely independent and not just interest groups masquerading under an independent sounding name
- Seek out sources that offer constructive arguments and respond or at least responsibly acknowledge evidence for the other side
- Try to confirm for yourself any factual claim quoted from a potentially biased source (good arguments cite their sources)
- Make sure evidence is not quoted out of context

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Use the web with care

A few keywords will give you a lorry load of information on any question you can think of.

Reliability is another matter

Don't rely on a website unless you have some idea of its source.

Key questions

- Who created this site?, Why did they create it?, What are their qualifications?, What does this mean if they don't tell you? How can you double check any claims?

Search engines do not search everything. They search only what is indexed which is only 10 to 20 percent of the available Web and heavily weighted towards merchandising and 'hot' sites

Also heavily weighted to your own personal preferences and search history

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Critical Writing

Constructs an argument

Pushes ideas forward

Has a 'line' or thread of ideas from start to finish

Assignments need a good balance between description (scene setting) and analysis

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In academia we talk a lot about arguments

“An argument is a formal presentation of evidence that supports a particular claim or position regarding an issue of interest to a specific audience”

<https://wac.colostate.edu/repository/writing/guides/guide/index.cfm?guideid=53>

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Organising an argument

One of the oldest forms of structuring an argument is still in use today: It consists of six parts

- An Introduction establishing the author as **knowledgeable** and **trustworthy**, and the issue as one worthy of debate.
- A Brief Narrative providing **context and background**.
- A **Position Statement** containing a thesis or claim and an outline of the **reasons** that support taking the position.
- The Argument Itself containing the supportive **evidence** backing each reason the position is being taken
- **Refutations** that invalidate the opposing arguments
- A **conclusion** summarizing the argument and reflecting back on or reiterating key points made in the introduction' (LeCourt, Kiefer and Connor, 1994-2022, emphasis added
<https://wac.colostate.edu/resources/writing/guides/reading/>)

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TOP TIPS

Evidence-based argument

Do: collect evidence from reading and your own research and use this to develop your argument.

Don't: **decide what you think first and then choose only evidence to fit your argument.**

Actively look for other opinions

Reliable argument

Do: start from a reliable premise and arrive at a logical conclusion.

Eg: There is a lot of evidence that smoking causes heart disease and lung cancer, therefore smoking is a health hazard.

Don't: create faulty arguments based on a weak premise.

Eg: There is strong positive correlation between vocabulary and shoe size, therefore having a larger vocabulary causes increased foot growth.

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TOP TIPS

Acknowledge limitations

Do: account for the weaknesses in your evidence, argument or research; this shows thoroughness and helps fill in gaps

Don't: ignore limitations; this undermines your argument

Conclusions

It's OK to have an opinion – as long as it is an informed opinion, and you can back it up by reference to the available evidence.

Remember that you don't always have to come down on one side or the other of an argument. You may decide that further evidence or research is required, or that different perspectives have equal value or merit. In this situation, your conclusion might tease out some of the possible consequences of these different perspectives or approaches.

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TOP TIPS

Structure & cohesion

Do: organise points logically and use signposting and connective phrases to guide readers through your argument.

Don't: start writing without planning the general structure.

Cautious language

Do: use hedging phrases like "this may mean that..." or "it is likely that" to reflect uncertainty appropriately.

Don't: use absolute statements like "this proves that" that may not apply to all situations.

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Writing killers

Over reliance on low quality sources

Lack of landmark or seminal literature – definitive writing in the field e.g. Schein on Culture

Lack of current literature – what is happening in the field now, critiques etc

Description instead of integration and synthesis (comes with practice)

Irrelevant or unfocused content – always have a plan

Poor structure and layout, grammatical errors, etc

Plagiarism and poor referencing



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Arguments vs. Non-Arguments

You will need to use some DESCRIPTIONS or SUMMARIES in coherent writing

They provide important background information but should be used with not as a substitute for critical writing



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Descriptive vs critical writing (features)

Descriptive writing

- summarises previous research
- gives background for your argument
- is necessary, but not sufficient

Critical writing

- shows your own reasoning and ideas: instead of what, so what?
- questioning processes: analysing, evaluating and creating
- considers reasons for, implications and limitations of research
- builds an evidence-based argument
- is required to access higher grades



Your writing might be too descriptive if

You include too many sentences that report another author’s ideas without any analysis such as “Murphy (2020) states that and also that..... “

You include a lot of direct quotes without giving your own commentary or analysis of the ideas presented

You simply list events in chronological order, such as in 2001 this happened, followed by this in 2010 followed by ...



Critical Reading is vital in becoming a critical writer.

While reading make decisions about the usefulness and quality of what you are reading

Think about the positive and negative aspects of other peoples work and take a note

When writing try to establish a habit of including what you thing when you quote another writer, for example

- Murphy (2022) states that... and also that... This is significant or important because
- Smith's (2017) work is very significant because ...

Use phrases that are useful for critical writing

This theory does not fully explain why....

Previously mention methods contain some drawbacks because

The sample size is arguably too small for generalisations

Murphy makes no attempt to distinguish between different types of....

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Critical reading using the SQ3R method

1. Survey - Use summaries (chapter, abstracts, key words, indexes), introductions, conclusions, figures tables to get a sense of what the text is about
2. Question – read with a purpose. What is the main issue under discussion, how is this relevant to my topic, what are the main points, what is the conclusion. What is the evidence? Is it up to date? Is the methodology appropriate? Is their evidence of bias?
3. Read with your chosen questions in mind, make notes to keep your reading active
4. Recall – put the text down and try to explain what you have read in your own words as if you had to tell someone else about the topic. Or jot down a paragraph about what you have read
5. Review – look over your questions, have you answered them? Do you understand the text?

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Authentic leadership theory: The case for and against☆

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ABSTRACT

Scholarly and practitioner interest in the topic of authentic leadership has grown dramatically over the past two decades. Running parallel to this interest, however, have been a number of concerns regarding the conceptual and methodological underpinnings for research on the construct. In this exchange of letters, the cases for and against the current authentic leadership theory are made. Through a dialogue, several areas of common ground are identified, as well as focal areas where the cases for and against the utility of authentic leadership theory for scholars and practitioners sharply diverge. Suggestions for future theorizing and research that reflect areas of common ground are advanced, along with divergent perspectives on how research on authenticity and leadership should proceed. Despite their differences, both author teams found the dialogue in itself to be a healthy process for theory development and encourage constructive future dialogue on other areas where theoretical perspectives diverge.

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