

301 Academic Skills Resource: **Critical Thinking**



Defining critical thinking

'Critical' in university work means being thoughtful, asking questions, not taking things you read (or hear) at face value. It means finding information and understanding different approaches and using them in your writing.

A critical approach is not a form of writing in itself (like an essay or report)...it is a mindset you need for life and work, and very much part of the wider picture of having a methodical and thoughtful approach to your studies. When you find your own questioning 'critical' approach (and you will!), you and your studies will take off. (Williams, 2009)

Why is it important?

An academic skill?

"You will need to develop reasoned arguments based on a logical interpretation of reliable sources information. These skills are essential if you want to obtain high grades in your university study and, like other skills, they improve with practice."

Open University, Skills for OU Study

An employability skill?

"Mentions of critical thinking in job postings have doubled since 2009"

Melissa Korn (2014), 'Bosses Seek 'Critical Thinking,' but What Is That?', *Wall Street Journal*

A strategic skill?

"Developing our abilities to think more clearly, richly, fully—individually and collectively—is crucial [to solving world problems]."

Adrian West, research director, Edward de Bono Foundation U.K

A lifelong-learning skill?

"Critical thinking reduces the power of advertisers, the unscrupulous and the pretentious, and can neutralize the sway of an unsupported argument. This is a skill students enjoy learning because they see immediately that it gives them more control."

G. Randy Kasten (2012), 'Critical Thinking: A Necessary Skill in the Age of Spin', *Edutopia*

Critical reading

Critical reading requires you to evaluate arguments in a text, distinguish fact from opinion and look at arguments for and against. This also means being aware of your own opinions (positive and negative) so you can make an objective evaluation. It is also important to be aware of the writer's background, assumptions and purposes. Everyone has an agenda and will emphasise details which support their argument and ignore details that do not.

Purpose and background

- 1. Why are you reading this text? What is your purpose?
- 2. What type of text is it: research report, essay, textbook, book review etc.?
- 3. What do you know about the subject of the text?
- 4. What else has been written on the subject of the text?
- 5. What controversies exist in this area? How does this text fit in?

The author and the text

- 1. What do you know about the author? What authority does the author have?
- 2. Who is the intended audience?
- 3. What is the author's purpose? Why has the text been written?
- 4. What is the source of the text? Is it reputable? Who is the publisher?
- 5. What is the date of publication? Is it appropriate to the argument?
- 6. What conclusions are drawn?

Evidence used

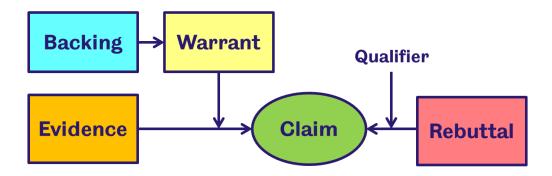
- 1. Is there a clear distinction between fact and opinion?
- 2. Is evidence used to support arguments? How good is the evidence?
- 3. In an experimental study, was the sample size adequate? Is the data reliable?
- 4. How does the writer use other texts and other people's ideas?
- 5. Are the writer's conclusions reasonable in light of the evidence presented?
- 6. How do the conclusions relate to other similar research?

Assumptions made

- 1. What assumptions has the writer made? Are they valid?
- 2. What beliefs or values does the writer hold? Are they explicit?
- 3. Look at the language used, e.g. active/passive verbs, pronouns, emphatic words such as 'it is obvious', 'definitely' and 'of course'.
- 4. Look for hedging language (which is language that is cautious) such as 'possible', 'might', 'perhaps'.
- 5. Look for emotional arguments, use of maximisers: 'completely', 'absolutely', 'entirely', or minimisers: 'only', 'just', 'hardly', simply', 'merely'.
- 6. How else could the text have been written?

Toulmin Model for Argument Construction

The following model provides a way to break down an argument into its constituent parts in order to ensure that it adheres to the rules of logic and clarity:



Element	Your argument
Claim A contentious statement that you wish to prove.	
Evidence Data or information to support your claim.	
Warrant Convince your audience that the connection between your claim and evidence is valid.	
Backing Further evidence (context) supplied to support the warrant.	
Rebuttal Anticipate potential objections, counter-arguments or alternative points of view.	
Qualified claim Do you need to adapt your claim to acknowledge any fallacies in your argument?.	

Adapted from: Andrea Lunsford and John Ruszkiewicz, Everything's an Argument (2013), Bedford St Martin's

Critical writing

Here are some examples illustrating the differences between descriptive and critical, analytical writing.

Descriptive writing	Critical analytical writing
States what happened	Identifies the significance of something that happened
States what something is like	Evaluates its strengths and weaknesses
States the order in which things happened	Structures information in order of importance
Explains what a theory says	Discusses the importance/failings/relevance of a theory in relation to a topic/idea
Explains how something works	Indicates why something will work (best)
Notes the methods used	Evaluates whether the extent to which the methods used were fit for purpose
Says when something occurred	Identifies why timing is of importance
States the different components	Weighs up the importance of component parts
States links between items	Shows the relevance of links between pieces of information
Gives information	Draws conclusions

Adapted from: Cottrell, S., (2008) *The Study Skills Handbook*, Hampshire: Palgrave Macmillan, p286.

Useful Resources

Manchester University PhraseBank (http://www.phrasebank.manchester.ac.uk/critical.htm) provides useful phrases for constructing critical arguments.

1:1 Study Skills Tutorials

1:1 sessions are available with our 301 Study Skills tutors to discuss individual concerns you have about critical thinking. These 30-minute slots can be booked through the 301 website or at the reception desk: http://www.sheffield.ac.uk/ssid/301/services/studyskills

Relevant Academic Skills Workshops

Sign up online or visit the 301 reception desk: http://www.sheffield.ac.uk/ssid/301/services/studyskills

- Academic Writing
- Note Taking
- Independent study