

## READING AT UNIVERSITY – Critical thinking

Assessment criteria often include a requirement for students to demonstrate analytical and critical thinking. Thinking critically is fundamental to academic enquiry – it forms the basis for how knowledge in a field is established and advanced. For this reason there is an expectation that students will develop this skill throughout their courses and on into their future professional practice in whatever field they choose to pursue.

Although the focus of critical thinking can vary from one discipline to another, there are general principles which apply across all disciplines. An important aspect of critical thinking is the ability to evaluate the arguments and ideas presented by others, and to demonstrate this in how you present and analyse these ideas in your writing. Also important is your capacity to demonstrate a critical perspective in how you express your own ideas.

### What is 'evidence'?

In a court of law judges make decisions based on the evidence presented to them. Similarly, academics and researchers base their claims on evidence. In the academic context evidence consists of all the reasons, examples, statistical data and other information presented in support of a hypothesis or argument.

### Some general questions to consider

Before engaging in detailed analysis of a text, it is useful to read it with some more general questions in mind. It is also important to identify key components. The questions listed in Table 1 can be useful to consider as you read – they will help you to orient yourself to the text, and begin to critically evaluate it.

Questions to help you understand and evaluate academic texts
What is the intended <i>purpose</i> of the text?
Who is the intended <i>audience</i> ?
What is the central argument or focus of the text?
Is a consistent argument or analysis presented?
Are supporting reasons and examples appropriate and relevant to the author's position on the topic?
Are there underlying assumptions? If so, are these reasonable and valid?
Is the topic presented in a balanced way? Are a range of perspectives explored and discussed?
Have alternative explanations been considered?
Have an adequate range of academic sources (i.e. references) been consulted?
Are findings/conclusions consistent with the evidence presented?
<i>According to the authors</i> , what is the significance of their central findings/conclusions?

Table 1: Questions to help you understand and evaluate an academic text  
(adapted from Greetham, 2008, p. 85)

## Evaluating 'argument'

It is useful to consider as you read how convincing you find the author's position or argument. Is their explanation of the topic logical and clear? What evidence have they provided to support their position? What are the strengths and potential weaknesses in their perspective? Are any claims they make reasonable, based on the information and discussion they have provided?

## Key skills in critical thinking

The Open University (2008, cited in Williams, 2009) has proposed a 'stairway' to critical thinking (Figure 1) involving several steps. The initial steps focus on the process of reading and understanding an academic source; the subsequent steps are skills you apply in writing about academic sources.

Develop arguments, positions and opinions based on and supported by your critical evaluation of academic sources; make inferences, identify implications and draw conclusions.			<b>Justify</b>
Apply your understandings based on your critical evaluation to issues, problems, projects and assessment tasks.		<b>Apply</b>	
Assess sources based on factors such as reliability, relevance, clarity, logic, and quality of evidence.		<b>Evaluate</b>	
Make logical connections between the different sources that help you present, shape and support your ideas. Group sources based on similarities and differences.		<b>Synthesise</b>	
		<b>Compare</b>	Consider similarities and differences between sources.
		<b>Analyse</b>	Examine how the key components fit together and relate to each other.
	<b>Understand</b>	Identify and comprehend the key ideas, assumptions, arguments and evidence.	
<b>Process</b>	Take in information (e.g. reading, listening, seeing, doing).		

Figure 1: A stairway to critical thinking (adapted from Open University, 2008 as cited in Williams 2009)

Note that skills such as analysing, synthesising, and evaluating frequently appear in the instructions to assessment tasks. The stairway to critical thinking shown in Figure 1 can help you to better understand what is required of you in satisfactorily completing assessment task responses. Although the skills are listed in a hierarchy, there is considerable overlap in when and how you compare, evaluate and synthesise the academic sources you consult.

### Other resources

Reading at uni – Getting started  
 Reading at uni – How and why are you reading?  
 Reading at uni – Critiquing research

### References

Allen, M. (1997). *Smart thinking*. Melbourne: Oxford.  
 Greetham, B. (2008). *How to write better essays* (2<sup>nd</sup> ed.). Houndmills: Palgrave Macmillan.  
 Taylor, G. (1989). *The student's writing guide*. New York, US: Cambridge University Press.  
 Williams, K. (2009). *Getting critical*. Houndmills: Palgrave Macmillan.