

# **Critical and Analytical Thinking**

## **What is critical and analytical thinking?**

Critical analytical thinking is a key part of university study. Many first year students receive comments such as 'not analytical enough' on their early assignments. You will find that you develop your critical and analytical skills as you go through university. In brief, this means looking very closely at the detail and not taking what you read or hear for granted. Your tutors will expect you to:

- evaluate how far materials are appropriate, and up-to-date
- evaluate how far the evidence or examples used in materials really proves the point that the author claims
- to weigh up opinions, arguments or solutions against appropriate criteria
- to think a line of reasoning through to its logical conclusion
- check for hidden bias or hidden assumptions
- check whether the evidence and argument really support the conclusions.

You will need to do this for materials that you read. For example, when you cite a source of evidence for your own arguments, you will need to be sure that the evidence really does support your point, and is accurate and reliable. You are expected to be very critical of your sources, using evidence that has been well researched rather than just your own opinion or what your friends think.

## **Identify the main line of reasoning in what you read or write**

- What is the main argument or line of reasoning?
- Is the line of reasoning clear from the text?

## **Critically evaluate the line of reasoning for what you read or write**

- Note any statements from the text which strengthen its line of reasoning or prove the argument.
- What statements, if any, undermine the argument?
- Are points made in the best logical order?

## **Identify hidden agendas in your sources and in your own writing**

- What hidden agendas might the writer have that might make you question the contents or conclusions of the passage? Consider what they might hope to gain through writing this piece.
- What information might be missing that could paint a different picture?

### **Evaluate evidence in the text**

- What kinds of evidence or examples does the writer use? How reliable and useful is this evidence?
- Does it really support the argument? Is the evidence strong enough?
- Is the data up-to-date?
- Does the text use reliable sources? What are these? What makes you think they are or are not reliable?

### **Look for bias**

- Do you think there may be any bias in the text? Give reasons and examples.
- Comment on any statistics used. Are these likely to give a true and full picture?
- Does their writing reflect a political viewpoint?
- Who might disagree with the writer?

### **Identify the writer's conclusions**

- Does the evidence support the writer's conclusions?
- Does the line of reasoning lead you to make the same conclusions?

### **Critical skills when writing**

- Apply the same rigor to your own writing as you do to analyzing source materials.
- Work out early on what your conclusion is and write this down where you can see it easily. Use this as a guide for what to read, what experiments to run, what examples to use.
- Before you begin your main piece of writing for an assignment, write your conclusion on a piece of paper and stick this at the top of the computer. Keep referring back to this to ensure that all of your writing leads towards

this conclusion. The outline plan for your writing should map out how each paragraph leads your reader towards the conclusion.

- Ensure that your conclusion can be supported by the evidence. If you cannot find the evidence to support your position, you may need to change your conclusion.