

## 8 Writing critically

Chapter 8 focuses on writing critically. It starts with texts that explain and justify then moves on to texts that analyse and evaluate, that is texts that use the process of argumentation. Chapter 7 focused on descriptive writing and gave examples of writing that defines, describes, reports and classifies or categorises and reports. This process of description is essential. However, it is not enough for work in higher education Nash (1990, p. 10) clearly points out:

‘The student who gives only the facts, with no assessment or interpretation, gets poor marks; the student who floats on clouds of subjectivity without ever touching hard propositional ground probably gets no marks at all.’

This means that when you write critically, you need to justify and give evidence for your ideas, suggest what other points of view there are and evaluate them.

The chapter will cover:

- providing reasons and explanations
- arguing a point of view
- evaluating a point of view
- comparing and contrasting
- providing support by – giving examples, or providing evidence
- drawing conclusions.

### USING THIS CHAPTER

If you want to dip into sections	Page	If you want to try the activities	Page
1 Introduction	102	8.1 Identifying explanations	104
2 Providing reasons and explanations	103	8.2–3 Writing explanations	104
3 Arguing a point of view	105	8.4 Identifying arguments	105
4 Evaluating a point of view	106	8.5–6 Writing cautiously	108
5 Comparing and contrasting	114	8.7 Identifying points of view	109
6 Proving support	118	8.8 Identifying evaluative phrases	111
7 Drawing conclusions	121	8.9–11 Describing advantages	113
8 Chapter summary	123	8.12–13 Comparing and contrasting	115
Feedback on activities	124	8.14 Discussing differences	117
		8.15 Identifying evidence	119
		8.16 Identifying examples	120
		8.17–18 Supporting arguments	121
		8.19 Writing conclusions	122

## 8 Writing critically

# 1 Introduction

As has been pointed out before, in higher education, descriptive texts will be unlikely to be useful by themselves – facts do not speak for themselves; you have to speak for them. You will usually have to analyse and evaluate as well. In other words, you will need to write more critically. If you do not, you will be accused of being too descriptive, or of not engaging with the subject, or of not being critical. All these will lose you marks.

Description may answer questions what or how, but you also need to go beyond that: you need to justify and give evidence for your claims, suggest what other points of view there are and evaluate them. This is what being critical means in this context. It does not mean finding fault with everything and being wholly negative – in fact, in some subjects you will rarely be negative. When you write critically, you will compare and contrast arguments and ideas; you will find advantages and disadvantages of solutions to problems. You will find explanations for actions and processes and provide evidence and support for your points of view.

## Writing critically

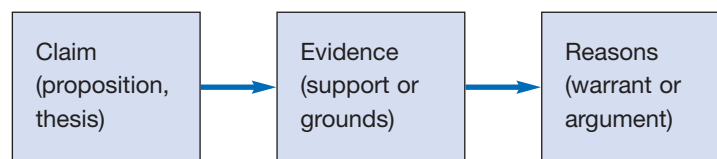
Writing critically involves analysing and evaluating your own and other's work and presenting a point of view which you can support. It involves analysis, evaluation and presenting your point of view.

Analysis	Evaluation	Presenting a point of view
<p>Analysis examines and breaks information into parts:</p> <ul style="list-style-type: none"><li>• it identifies causes and effects;</li><li>• it draws conclusions;</li><li>• it finds evidence and examples to support generalisations;</li><li>• it makes connections, comparisons and contrasts.</li><li>• it distinguishes between facts and inferences;</li><li>• it tries to provide reasons</li></ul> <p>e.g.</p> <ul style="list-style-type: none"><li>• How is _____ related to ...?</li><li>• Can you show a connection between ...?</li><li>• Why ...?</li><li>• How would you prove/disprove ...?</li></ul>	<p>Evaluation makes judgements:</p> <ul style="list-style-type: none"><li>• it makes judgements about the value of information, ideas or materials for a given purpose in a given context;</li><li>• it investigates to what extent something is true;</li><li>• it investigates importance;</li><li>• it interprets and justifies.</li></ul> <p>e.g.</p> <ul style="list-style-type: none"><li>• Do you agree with the actions/outcomes ...?</li><li>• How important is ...?</li></ul>	<p>Presenting your point of view involves giving your opinion:</p> <ul style="list-style-type: none"><li>• it involves giving your opinion;</li><li>• you provide reasoned evidence to support your point of view;</li><li>• you deal with other people's point of view.</li></ul> <p>e.g.</p> <ul style="list-style-type: none"><li>• What is your opinion of ...?</li><li>• Provide a solution to ...</li></ul>

## Arguing and discussing

In academic writing, arguing and discussing is often part of a larger piece of writing. It may be an exam question with an instruction such as discuss or it may be part of the discussion section of a longer report. Engineers may not have to write essays, but they will certainly need to discuss the results of any practical work they have been involved in. In arguing and discussing, you are expected to consider different points of view and discuss the positive and negative aspects of each case. On the basis of your discussion, you can then choose one point of view and persuade your readers that you are correct. This means giving your opinions (positive and negative) on the work of others and your own opinions based on what you have learned or found.

As always, all your opinions must be supported: you should produce your evidence and explain why this evidence supports your point of view. It is important that when you present your point of view, you distinguish between your point of view, your evidence and your reasons for believing what you do. You need to be clear about how the evidence you have provided leads to the claim you are making. (See Toulmin, 1958).



## 2 Providing reasons and explanations

Being critical includes making connections between the ideas of your subject and trying to explain why things happen as they do. You need to give reasons and provide explanations.

Take the following situation:

**Pollution is increasing.**

You might want to ask why this is happening and want the reason or explanation for this. One reason is that:

**People are burning more fossil fuels.**

So:

**Pollution is increasing** is the situation.

**People are burning more fossil fuels** is the reason or explanation.

Read the following text and observe the explanatory relationships. The text is about why plants become weak or die. The text attempts to explain why this occurs. It

## 8 Writing critically

suggests reasons to do with water: too little or too much; and sunshine: too little or too much. The following explanatory relations exist:

- Lack of water → dryness in the soil → leaves to wilt → death of plant.
- Too much water → leaves droop or become yellow → death of the plant.
- Too strong sun → baked soil → roots killed.
- Lack of light → pale leaves and thin stems → death of the plant.

You might also have noticed that the text starts with an introductory sentence, explaining the situation. It then clearly offers several explanations for the situation.

There are several factors to be taken into account when studying why some plants become weak or die. One reason is lack of water. Dryness in the soil causes the leaves to wilt, and may give rise to the death of the plant. On the other hand, too much water may result in the leaves drooping, or becoming yellow. While sunshine is necessary for plants, if it is too strong, the soil may be baked and the roots killed. However, if there is no light, the leaves will become pale and the stems thin. Consequently the plant may die.

### Activity 8.1 Identifying explanations

Identify the situation and the explanations in the following text.

Most road traffic accidents occur between four and six o'clock in the morning, with a second, slightly smaller peak occurring in the middle of the afternoon (Home and Reyner 1999). Most researchers attribute this finding to sleeplessness and/or fatigue. A lack of sleep seems to exacerbate driving performance as does a feeling of fatigue and the ingestion of carbohydrates (London et al., 2004). Imagine the case of a person who has completed a night shift.

Martin, Carlson & Buskist, 2007, p. 385

### Activity 8.2 Writing explanations

Use the following information to explain why star dunes attain the greatest height.

Reason	Situation
Star dunes develop in the depositional centres of sand seas, where net sediment accumulation and sand-transporting wind directional variability is greatest.	Of the main dune types identified in Figure 12.11, star dunes usually attain the greatest size.

### Activity 8.3 Explaining why

Use the following notes to explain why new products fail.

- Good idea but overestimate market – no demand – e.g. electronic books
- Poor design – technological drawbacks – readers read e-books in range of situations and positions
- No better than other product
- Incorrectly positioned
- Development costs high
- Competitors fight back hard

## 3 Arguing a point of view

An argument is a statement of your claim (your point of view) supported by your evidence along with the reasons why you believe that your evidence supports your claim. Your statement will most likely be debatable in that you will believe in it but other people may disagree. The objective of your argument is to show your reader that you are correct.

The statement of your claim will normally be a quite general declaration of fact but in academic writing it may be stated cautiously.

Look at the first sentence in the following text. It is a clear statement of the claim being made by the writer – that language processing does not decline with age but improves. It is expressed cautiously ‘certain aspects’, ‘may not’, ‘may actually’ (see Chapter 6 for cautious language and topic sentences). The remainder of the paragraph gives more information and provides examples and support for the claim.

There are certain aspects of language processing that may not decline with age and may actually improve. One of the greatest gains is seen in vocabulary (Bayley and Oden, 1955; Jones, 1959). However, older individuals have difficulty in retrieving or accessing these words and exhibit a greater number of tip-of-the-tongue responses than do young individuals during retrieval (Bowles and Poon, 1985).

Martin, Carlson & Buskist, 2007, p. 491

### Activity 8.4 Identifying arguments

Read the following text and identify the claim being made.

There seems to be a clear, obvious and important link between intelligence and nutrition. Malnutrition can impair brain function (Brown and Pollitt, 1996) and IQ in the long term;

## 8 Writing critically

iodine deficiency during pregnancy can lead to retardation and cretinism. In the late 1980s and early 1990s, a series of studies reported significant differences in non-verbal IQ between schoolchildren who received vitamin and mineral supplements (VMS) and those who received a placebo (Benton, 1992; Haller, 1995; Eysenck and Schoenthaler, 1997). Those who received the supplements scored significantly better.

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Martin, Carlson & Buskist, 2007, p. 486

## 4 Evaluating a point of view

As well as stating your own point of view, you will probably need to comment on and evaluate ideas that you have learned and read about as well as the work of others.

As always, all your opinions must be supported – you should produce your evidence and explain why this evidence supports your point of view.

When evaluating a point of view or a conclusion, you may want to:

- present the point of view
- comment on it positively or negatively.

Look at the following texts which present other people's points of view. Notice the kind of language you can use to introduce these viewpoints:

So, **some people** have argued that the right of people suspected of committing a crime to remain silent when questioned, without this being taken as evidence of guilt, was part of our constitution; nevertheless, that right was essentially abolished by the Criminal Justice and Public Order Act 1994. Elliott & Quinn, 2008, p. 5

**Those** in favour of our unwritten constitution argue that it is the product of centuries of gradual development, forming part of our cultural heritage which it would be wrong to destroy. Elliott & Quinn, 2008, p. 6

**They** also point out that the lack of any special procedural requirements for changing it allows flexibility, so that the constitution develops along with the changing needs of society. Elliott & Quinn, 2008, p. 5

**According to Smith & Joner (2006)**, commercial lawyers would be most likely to survive, since they have a specialist knowledge that solicitors cannot provide. Elliott & Quinn, 2008, p. 184–86

## Evaluating a point of view

Some other language that you might want to use to introduce other people's arguments is given below:

Some people X In a study of Y, X	maintain(s) argue(s) believe(s) claim(s) point(s) out seem(s) to believe	that	...
It is the view of X It can be argued It might be said			
According to X			

### Activity 8.7 Identifying points of view

Identify other people's points of view in the texts below. Indicate the phrases used to show this.

There has been much discussion over recent years as to whether the professions will eventually fuse. Elliott & Quinn, 2008, p. 185

Others have suggested that common law barristers have a better chance of surviving competition from solicitors. They cater for the needs of ordinary high street solicitors, who generally have a wide-ranging practice, and spend much of their time seeing clients and gathering case information. Elliott & Quinn, 2008, p. 185

Alternatively, it has been suggested that the Bar might survive, but in a much reduced form, and there is much debate about which areas would suffer most. Elliott & Quinn, 2008, p. 185

Some studies, however, have shown that it is not necessarily distraction that is responsible for reducing pain but rather the emotional quality of the distractor. Positive stimuli, such as humour and laughter, are known to reduce pain perception (Cogan et al., 1987; Rotton and Shats, 1996) but increasing the attention required to complete cognitive tasks (distraction without emotion) does not (McCaul and Malott, 1984).

Martin, Carlson & Buskist, 2007, p. 376

Look at the following texts which present comments on other people's points of view. These comments can be either positive or negative. Both the examples here are negative. This is shown by the linking word 'however' and the evaluative word 'little'.

## 8 Writing critically

This leaves little opportunity to swot up on the finer details of every area of law with which clients need help so, where specialist legal analysis is needed, they refer the client to a barrister with experience in the relevant area.

Elliott & Quinn, 2008, p. 185

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Martin, Carlson & Buskist, 2007, p. 376

## Providing evidence to support your claims

As well as examples, you can use research findings, other people's work, your knowledge or other people's words to support your claims.

You can use data obtained from research to support your claim.

Even at an early age girls are out-performing boys in English:

- at age 7, 85% of girls gained a level 2+ while only 72% of boys achieved this
- some 30% of girls attained a level 3 and only 20% of boys, and by the end of primary schooling girls are on average half a level ahead of boys in English
- national statistics show that this gap continues and widens until GCSE, where the gap in performance in English is one of the highest.

Davies, 2006, p. 36-37

You can use other people's work to support your claim.

There is a wealth of research to demonstrate that disabled children are more vulnerable to abuse and neglect than their non-disabled peers (Kelly, 1992; Miller, 2003). In addition to this, research also demonstrates that disabled children are not protected from harm to same extent as their non-disabled peers (Edwards and Richardson, 2003; Marchant and Page, 2003; Cooke, 2000).

Wilson, Ruch, Lymbery & Cooper, 2008, p. 556

You can use your knowledge to support your claim.

The law affects every aspect of our lives; it governs our conduct from the cradle to the grave and its influence even extends from before our birth to after our death. We live in a society which has developed a complex body of rules to control the activities of its members. There are laws which govern working conditions (e.g. by laying down minimum standards of health and safety), laws which regulate leisure pursuits (e.g. by banning alcohol on coaches and trains travelling to football matches), and laws which control personal relationships (e.g. by prohibiting marriage between close relatives).

Keenan & Riches, 2007, p. 3

## Drawing conclusions

As we have already seen, you can use other people's words to support your claims.

The issue of language has been hugely important in thinking about ways to address the discrimination and oppression of disabled people. Neil Thompson, a social work academic, writer and former practitioner states, 'The language we use either reinforces discrimination through constructing it as normal or contributes in some small way at least to undermining the continuance of a discriminatory discourse' (2007: 39).

Wilson, Ruch, Lymbery & Cooper, 2008, p. 540

See Chapter 10 for more ideas and practice.

### Activity 8.18 Supporting arguments

Use the information in the following extract to support the argument that we should invest in more hydroelectricity. Write a short paragraph.

Hydroelectricity is a renewable resource, unlike conventional fossil fuel and nuclear generating plant, and has no fuel cost. There are no flue-gas emissions and no nuclear waste. Hydroelectric plants have a predictable output since they can generate power when needed to match electricity demand. Labour costs associated with operating such plant are low as the plant is usually automated. Hydroelectric plants have long economic lives, with some plants now in service having been built 50 to 100 years ago. Reservoirs for hydroelectric schemes often provide opportunities for leisure and tourism, such as fishing and sailing. Large dams can also control floods, which might otherwise have adversely affected the downstream environment.

Hughes, 2008, p. 810

## 7 Drawing conclusions

After presenting your point of view, evaluating the possible choices, all well-supported with evidence, you need to come to a conclusion. The central function of the conclusion is to confirm that the main purpose of the text has been achieved.

This concluding section should:

- recall the issues raised in the introduction – remind the reader of your task;
- draw together the points made in the main body of the piece of writing;
- and come to a clear conclusion.

In an exam or other kind of assessment, the conclusion should make it absolutely clear that the question has been addressed and answered fully.

Read the following example of the conclusion from a text on computer assisted language learning and teaching. The study investigated the use of the World-Wide-Web for teaching writing in a British university. You will see that sentence 1 provides

## 8 Writing critically

background information to the problem that the research hoped to solve. Sentence 2 clearly states the problem. Sentence 3 gives the purpose of the study. Sentence 4 summarises the conclusion from the results. Sentence 5 draws it all together by making suggestions for the future.

### Conclusion

<sup>1</sup>During the past 10 years, the use of computers in education has increased dramatically and a wide range of educational computer programmes are now widely available for individual and classroom use. <sup>2</sup>However, there has been very little research reported on the effectiveness of such use. <sup>3</sup>The purpose of the present study was therefore to ascertain the effectiveness of using computer-assisted instruction as compared to traditional classroom instruction in an EAP writing class. <sup>4</sup>The findings clearly suggest that the inclusion of web-based materials in EAP writing courses for post-graduate students from East-Asia on an English language preparation course is effective. <sup>5</sup>Further research is needed, however, before the use of such materials can be recommended for all students in all subject areas at all levels.

## Activity 8.19 Writing conclusions

Read the following notes on a research project on the usefulness of a Virtual Learning Environment (VLE) conducted recently. Write the conclusion.

*Internat Postgrads find discussion difficult.  
Can we help using VLE?  
Tried to use discussion facility of VLE  
Problem – no teacher present – will students take it seriously  
Studied it for two years.  
Asked students what they thought  
Looked at what they were producing.  
Found students take it seriously if they know why  
Ss need help.*

In all cases, your conclusion will be cautious, it will probably be qualified and generalisations may be made. You may also have different degrees of certainty about the claims you are making.

**TIP:** Make sure your conclusions follow from your data.

You need, though, to signal your conclusion explicitly in some way. Some words and phrases that you can use to do that are given below:

To sum up, To conclude, To summarise, In conclusion,	...
---------------------------------------------------------------	-----

Therefore, Thus, On this basis, Given this,	it	can may	be	concluded deduced inferred	that	...
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In conclusion, Finally	we/may say it can/may be said	that	...
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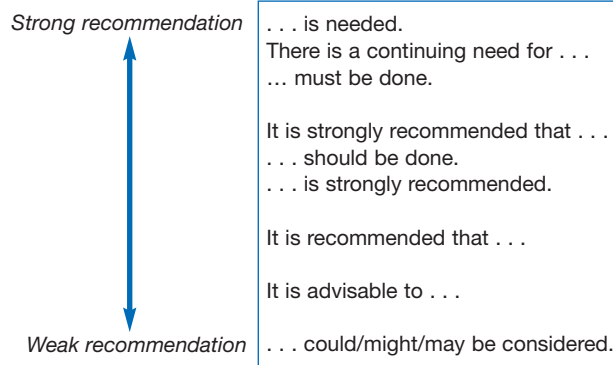
## Recommendations

Many conclusions, especially after reports, finish with recommendations or suggestions for further work.

Further research is needed, however, before the use of such materials can be recommended for all students in all subject areas at all levels.

However these solutions will only be temporary and the only long-term solution definitely seems to be conservation and pollution control.

As with all parts of your conclusion, your recommendations may be cautious.



## 8 Summary

Chapter 8 has focuses on a difficult area for many students, writing critically. It started with texts that explain and justify then moved on to texts that analyse and evaluate. That is it tried to help with the process of argumentation. This is because we

## 8 Writing critically

believe that these higher level thinking and writing skills are essential for success in higher education.

Chapter 8 therefore built on Chapter 7 to help you to write critically. It included how to justify and give evidence for your ideas, suggest what other points of view there are and evaluate them.

## References

Nash, W. (1990). The stuff these people write. In W. Nash (ed.). *The Writing Scholar* (pp. 8-30). London: Sage.

Toulmin, S. (1958). *The Uses of Argument*. Cambridge: Cambridge University Press.

## Feedback on activities

### Activity 8.1

Situation: traffic accidents occur mainly between four and six o'clock in the morning.

Reason: sleepiness and fatigue of drivers.

### Activity 8.2

Of the main dune types identified in Figure 12.11, star dunes usually attain the greatest size. This is because they develop in the depositional centres of sand seas, where net sediment accumulation and sand-transporting wind directional variability is greatest.

Holden, 2008, p. 458

### Activity 8.3

#### Why do new products fail?

There are several reasons why so many new products fail. One reason is that, although an idea may be good, the company may overestimate market size. There just was not the demand for the product. For example electronic books (e-books) promised to deliver vast amounts of reading materials in a single lightweight package so that travellers would not have to haul large paperbacks around on vacations and business trips. Like many publishers, Random House UK made a foray into e-books at the turn of the decade. However, the product did not catch on. According to the company's interactive director, 'It was not for lack of thought or interest – it is just because the consumer market did not happen.

Another reason is that the actual product may be poorly designed. There may be technological drawbacks. In the case of e-books, readers tend to read fiction in particular ways – curled up on a couch or sitting on a bus or train. E-books need a digital display, but readers rarely want to sit in front of a PC or carry a cumbersome laptop.

It may also be a 'me too' product which is no better than products that are already established in the marketplace. Or it might be incorrectly positioned in the market, launched at the wrong time, overpriced or advertised and promoted badly. A high-level executive might push a favourite idea despite poor marketing research findings. Sometimes the costs of product development are higher than expected and sometimes competitors fight back harder than anticipated.

Kotler, Armstrong, Wong & Saunders, 2008, p. 552–3

#### Activity 8.4

The claim being made is that there is a connection between intelligence and nutrition.

#### Activity 8.7

Identify other points of view:

There has been much discussion over recent years as to whether the professions will eventually fuse. Elliott & Quinn, 2008, pp. 185

Others have suggested that common law barristers have a better chance of surviving competition from solicitors. They cater for the needs of ordinary high street solicitors, who generally have a wide-ranging practice, and spend much of their time seeing clients and gathering case information. Elliott & Quinn, 2008, pp. 185

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Some studies, however, have shown that it is not necessarily distraction that is responsible for reducing pain but rather the emotional quality of the distractor. Positive stimuli, such as humour and laughter, are known to reduce pain perception (Cogan et al., 1987; Rotton and Shats, 1996) but increasing the attention required to complete cognitive tasks (distraction without emotion) does not (McCaul and Malott, 1984). Martin, Carlson & Buskist, 2007, p. 376

Others argue that a person's disability is part of their identity in much the same way as their ethnicity or gender is. Many disabled writers (e.g. M. Oliver, V. Finkelstein, J. Morris, S. French) advocate use of the term 'disabled people', as disability is not a secondary feature of their identity. Wilson, Ruch, Lymbery & Cooper, 2008, p. 540

#### Activity 8.18

There are many reasons why hydroelectric power should be taken seriously by governments (Hughes, 2008). Firstly it is renewable and therefore has no cost. Secondly it produces no waste and therefore is very clean and cheap to run. Unlike the wind, for example, the water flow does not vary so the power produced is constant. Finally, hydroelectric plants last a long time and the lakes which hold the water can be used for water sports.

#### Activity 8.19

Post-graduate international students at UK institutions of Higher Education often find difficulty dealing with discussion. An attempt was made to help students with this by utilising the group discussion facility of a university Virtual Learning Environment (VLE). However, as most of the students were from East Asia, who may consider education as essentially a passive process, it was felt necessary to investigate whether they would undertake such an activity seriously and how well they would do. Our studies over the last two years clearly show that as long as the on-line discussion was clearly integrated into the course structure: aims, objectives and assessments, East-Asian students understand the purpose and take it seriously – like all students. The students do, though, need explicit teaching and help in using appropriate and relevant language. This is not something that is specific to our East Asian learners, but something all students need. We see here a new role for EAP.