# Introduction to critical writing

*the key to higher grades*

# Descriptive vs critical writing (features)

We need both descriptive and critical writing in our academic work. However, the key is getting the balance right and making sure you have included enough critical writing.

## Descriptive writing

- shows what you know: information in, information out
- illustrative processes: **remembering**, **understanding** and **applying**
- 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

# Descriptive vs critical writing (example)

These excerpts from an essay on species diversity demonstrate writing for different purposes:

## Introduction: largely descriptive writing to provide background information

A primary source of diversity within species is mutation: an ongoing alternation in the genetic makeup that can arise from mistakes in the organism's body, such as a faulty replication of DNA or from external sources like UV radiation (reviewed by Bertram, 2000). Although cells can remove mutations, some persist and become part of the genotype, which is the DNA in an organism's cells (reviewed by Bertram, 2000; Campbell et al., 2014).

## Body paragraph: combining descriptive & critical writing to create an argument

Species in the same environment and with the same ecological niche compete with each other for resources. Diversity allows specialisation of species to occur (Turner, 2004) in order to prevent extinction due to competition for resources. The genus *Manta* exemplifies this: taking up different habitats inhibited gene flow and so increased diversity between groups, resulting in the emergence of two separate species (Kashiwahi et al., 2011). This speciation prevents strong competition for resources and therefore provides increased inter-species resilience.

# Critical writing needs critical reading

Don’t just read everything you find! Think about:

- What is your purpose for reading this text?
- Is the source appropriate for your work?
- Is the content relevant to your work?
- What evidence can you use from this source?

This will help you select appropriate and relevant evidence for your writing. Find out more on our guide to critical reading.

# Critical writing is evidence-based

We use evidence from published sources or our own research findings to:

- show how your argument fits into the wider context.
- strengthen your argument by showing it's not just your subjective opinion.
- help the reader evaluate the strength of your points.

Find out more about using evidence in your writing:

- Why use evidence? [Google Slides]
- Quoting, paraphrasing & synthesising [YouTube]

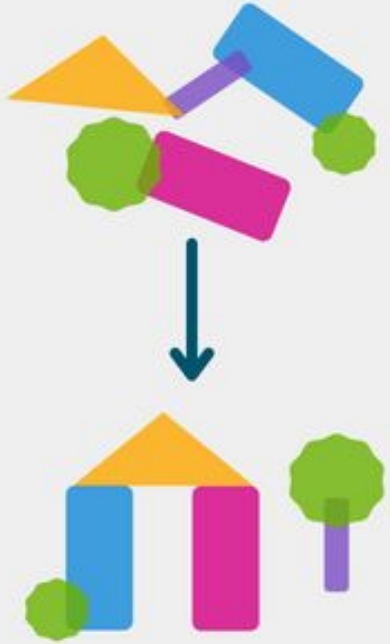
# Critical writing builds an argument

We integrate evidence from sources or our own research to create a cohesive critical argument. Instead of *what?*, we're interested in *so what?*:

- What does the evidence mean altogether?
- What are the implications?
- How does this integrate with your thinking?

This is how your own thinking and reasoning, so it's important for higher grades.

Find out more: Using evidence to build critical arguments



# Being the right amount of critical

We need to find the right balance of criticality:

- not being critical enough leads to largely descriptive work and weak arguments
- being too critical might take apart too many ideas, instead of building a coherent argument.

We’re aiming for that Goldilocks ‘just right’ point between not critical enough and too critical. Find out more on our guide to Being too critical [Google Doc]

# Questioning for critical writing

*analysing, evaluating and creating processes*

# Analysing

questions to explore reasons, relationships and possible alternatives

- Why did these findings occur?
- How does this build on previous findings?
- Why was this methodology, approach or framework chosen?
- Is the method appropriate to address the research question?
- Are the findings particularly strong or weak? If so, why?
- Could there be other explanations or conclusions?
- What can be learnt from this?

# Evaluating

questions to consider implications, conclusions and recommendations

- How far do the results address the research question or aims?
- What are the limitations of the research and their implications for findings or conclusions?
- Could this be applied to other situations?
- Which method, solution or framework (etc.) is most effective?
- What are the implications of this?
- What recommendations can be made based on this?

# Creating

questions to synthesise evidence from multiple sources to create your argument

- How does this fit into the wider context?
- What patterns can you see across sources and your own findings?
- Are there similarities and differences in results, methodology or conclusions?
- What does all the evidence mean together as a whole?
- How can you integrate this evidence into your argument?

# Top tips for critical writing

*dos and don’ts for key factors*

# Top tips: evidence and argument

## Select appropriate evidence

- Do: evaluate the reliability of sources and evidence and only include information that is relevant to your argument.
- Don't: accept sources or evidence without questioning or include everything you find.

## 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.

## 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.

# Tops tips: other factors

## 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

## 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.

## Recommendations

- Do: make recommendations based on the evidence and your conclusions.
- Don't: base recommendations on your subjective opinion, or tell people what you think they should do.

## 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.

# Critical writing examples

*excerpts from different subject areas*

# Example 1

This excerpt from an essay on treating reading disorders creates the evidence-based argument that there isn't a "one size fits all" approach to interventions:

Reading comprehension impairments (RCI) are highly heterogeneous with children showing different severities of difficulties or patterns of impairment (Torgesen, 2005; Snowling, 2008). This means it may be necessary to develop specialised interventions or individualise training for each child (Duff & Clarke, 2011). Most simply, this could occur by considering each child's strengths and weaknesses within a training programme (Carroll et al., 2011). Children could also receive different interventions depending on their particular impairments. For example, children with RCI respond differentially to two types of inferencing training depending on if they have problems making relevant inferences, or problems making inferences at all (McMaster et al., 2012). This suggests that interventions tailored to a child's specific difficulties may be more effective than generic training. However, children with RCI often have co-occurring problems in more than one skill, so it is also becoming more common for interventions to target multiple specific skills (Hulme & Snowling, 2011).

# Example 2

This excerpt from an essay exploring T. S. Eliot's portrayal of time and place in *The Love Song of J. Alfred Prufrock* analyses the use of classical references in the poem:

One way in which Eliot portrays the theme of place is through the use of classical references. For example, *Love Song* contains an excerpt from Dante's *Inferno* from *The Divine Comedy* (Alighieri, 2012) detailing the character Guido confessing his sins in Hell whilst believing nobody will ever know as there is no escape from Hell. This quote introduces *Love Song* as a poem about people who are false and pretend to be better than they really are. This is an important example as it sets the stage for the poem where Prufrock takes Guido's place in his confession, but only on the grounds that others will not repeat and know it afterwards. It is also noteworthy as it compares the biblical setting of Hell to Prufrock's environment of the modern city before the reader even begins the main body of the poem, therefore highlighting Eliot's modernist attitudes towards modernity and cityscapes before actually touching his stanzas. In this way, Eliot gives a strong sense of place in his poetry even in the introductory lines.

# Example 3

This excerpt from a research report investigating the relationship between weather and particulate air pollution (PM2.5) in Beijing draws evidence-based conclusions based on their and other research findings:

This report aims to address two research questions related to air pollution. Firstly, through a linear regression model several weather-related variables are found to be significant predictors of log(PM2.5), suggesting that there is a relationship between weather and air pollution levels in Beijing. To investigate further, a parallel lines model was used to explore the relationship between wind speed, wind direction and log(PM2.5). This found south winds are positively associated with air pollution levels, but north winds are negatively associated. This aligns with the findings of Liang et al. (2015), who suggest this is due to the relative strength of north winds. However, they also note that industrial and geographic factors play a part, meaning weather is not the sole influence on air pollution levels.

# Example 4

This excerpt from an essay on speech perception development of infants with cochlear implants evaluates previous research and makes recommendations for future research:

Research suggests that infants with cochlear implants (CI infants) possess basic phoneme discrimination abilities; they discriminate global, phonemic and rhythmic contrasts to the same level as normal hearing (NH) infants (Houston et al., 2003; Miyamoto et al., 2005), and can also distinguish bi-syllabic words differing only in spectral cues to the same level as NH infants, showing they did not make this discrimination based on rhythmic dfferences alone (Horn et al., 2003). However, the conclusions which can be drawn from these findings are limited as samples were small, results were highly variable and limited phoneme contrasts were tested. To establish if CI infants are able to discriminate phonemes sufficiently to go on to understand speech, a wide range of vowel and consonant contrasts relevant to speech understanding need to be tested with larger infant cohorts, ideally also including follow-up speech recognition testing.

# Example 5

This excerpt from an essay titled *The unfortunate paradox is that China is both a 'threat' and 'threatened'* analyses whether Japan views China as a military threat.

Fravel (2008) regards China as causing a 'security dilemma' in Asia by pursuing a military expansionist strategy, but also states that it is difficult to judge if proximal states really do consider China to be a threat. One way to judge this would be to study changes in nearby countries' military posture to balance any perceived threat from China. For example, recent Japanese naval expansion with the procurement of Helicopter carrying destroyers (China Daily, 2009) appears focussed toward countering the perceived threat of China's large, modern submarine force. In addition, the Japanese Defence White Paper (2010) notes violation of Japanese waters by Chinese submarines and provocation by 'top of the line' vessels. The principal Japanese anxiety stems from the lack of transparency of Chinese intentions; they appear to be defensive, but are difficult to assess fully. It should be noted, however, that North Korea is generally viewed as being of more concern (Watanabe, 2014).

# Next steps

Further resources to develop your academic writing skills:

- more advice on critical writing: Criticality in academic writing
- general writing advice: Academic Writing: a Practical Guide
- a range of study skills and digital skills advice: Skills Guide