Critical Thinking and Writing

Student Learning Advisory Service
Deep and Surface Learning

Surface Learning characteristics:

- Students aim to recall basic facts/information by rote
- Assessment anxiety (esp. exams)
  - Seen as test of memory
- Key concern: meet requirements
- Heavy dependence on basic books, lecture notes, handouts
  - Uncritical reproduction
  - Broad generalisations
- General lack of interest in topic
  - More interest in finishing
  - ‘Getting the job done quickly’
  - Key objective: getting reward

Deep learning characteristics:

- Students aim to understand ideas
  - Less need to know every detail
- Reduced assessment anxiety
  - Seen as test of understanding
- Key concern: do I ‘get it’?
- Readiness to explore range of sources and follow new leads
  - Critical review of alternatives
  - Consider implications/application
- Greater personal interest in topic
  - Curiosity: what does this mean?
  - Taking more time to explore
  - Key objective: how can I use this....?

Based on P. Ramsden *Learning to Teach in HE*

Essential ingredient for ‘deep learning’: **critical thinking**
What is Critical Writing?

- Learning how to present an **effective argument**
  - This means learning to present your reasoning and evidence in a clear, well structured manner (just as the writers of the texts you've read have had to present their ideas)
  - Different formats (e.g. essay, report, dissertation, projects etc.) mean that argument is presented in different ways but will always lead to a logical conclusion

- Critical writing is a **process** that involves using a range of writing skills as well as personal qualities
  - Most people find critical writing a challenge
  - It takes time to become skilled and confident
  - It can feel messy and frustrating at times – but also creative
Criticism

• In popular usage, ‘criticism’ tends to be negative
  - someone who always *criticises* others
• But the English word ‘criticism’ comes from the ancient Greek verb *krino* meaning ‘to judge’
• A ‘critic’ therefore (in Greek) was a **judge**
  - someone who investigated the evidence
  - tested the evidence (cross-examined witnesses)
  - considered alternative arguments and explanations
  - reached a conclusion (verdict)
Criticism

• Academic usage builds on the Greek sense
• Academically, a critic is someone who...
  - investigates the evidence for and against different ideas, theories, presentations of ‘facts’ and so on
  - tests the evidence through cross-examination
  - considers alternative perspectives and explanations
  - reaches an informed opinion in the light of evidence
  - gives reasoned arguments for the conclusion reached
    (NEVER ‘this is true’ BUT ‘this is true because...’)

Critical Thinking

Critical thinking is always:

• **Persistent**: constantly reviewing the evidence
• **Sceptical**: ‘hermeneutic of suspicion’
  - *always ask* Why am I being told *this*?
    - Who is telling me this? (vested interests, bias)
    - What am I *not* being told?
    - Where’s the evidence to support this?
    - How much of this is rhetoric?
    - How else might you read the same data?

• **Looking ahead**: what are the implications of this?
Critical Thinking

Critical thinking means:
• Stepping back from immediate personal feelings
• Examining data from *different* angles
• Checking the **accuracy** of information
• Checking the **logic of the argument**
• Looking for possible **flaws** in argument
• Understanding why other people see it differently
• Checking statistics and other empirical data
• Checking undeclared **assumptions**
• Reaching **informed conclusions**
Critical Thinking

Key questions include:
• Why? Who says?
• How does this work? How often? How much?
• How reliable is this information?
• Is this true? Why/why not?

Always look beneath surface; challenge your own thinking:
• What is main point I want to make?
• Can I back up my argument?
• Is my evidence relevant, accurate, up-to-date?
• Is my view based on false premises/false logic?
Thinking Critically in Assignments

Most common objection: reports are ‘descriptive not analytical’

**Descriptive:**
- States what happens
- Reports ‘facts’/results
- Summaries books
- Outlines theories
- Explains ideas
- Lists details
- Gives information

  Mechanical & wooden
  flat & simplistic

**Analytical:**
- Identifies key issues
- Evaluates strengths
- Considers alternatives
- Evaluates alternatives
- Gives reasons for choices
- Looks for links/causes
- Challenges (logic, data, etc)

Probes & tests:
informed & reasoned
Descriptive Writing

• Tells the reader what you’ve done
• Tends to use lots of quotes
• Gives a summary of a piece of literature
• Makes lists of things (literature, theories...) 
• Gives the ‘facts’: measurements, data, etc.
• Sets out the history of an event, idea, etc.
• Gives a biography of important people
• Summarises what is known about the topic
Critical Writing

• Gives a clear and confident account which *refuses* simply to accept what has been said
• Gives a *balanced* account of pros & cons of ideas
• Avoids unsubstantiated assertions
  – Asserts or assume something is simply true
• Uses paragraphs to *develop* and expand ideas
• ALWAYS gives a clear and precise account of the relevant evidence and arguments
• ALWAYS backs up argument with *evidence*
• ALWAYS gives reasons for conclusion
• ALWAYS recognises limitations (tends, suggests..)
• ALWAYS avoid simplistic conclusions
Difference: Critical v Descriptive

• **Descriptive** writing merely *sets the background*
  – Represents the situation as it stands
  – Does not analyse or challenge
• Attractive because it is relatively simple
  – Often used to ‘pad out’ essays and assignments
• **Critical** writing *transforms* the information
  – Not reporting but constructing an argument
  – Pushing the ideas forward
  – Has a ‘line’ – a thread of ideas from start to finish
• Assignments need a good balance between description (scene-setting) and *analysis*
Critical Thinking

Good critical thinking is systematic – like a criminal investigation; you need to:

- **Investigate** the problem thoroughly
- **Prosecute** and **defend** the ideas
- **Cross examine** the witnesses (literature)
- Sum up and consider **theory**
- Reach an **informed verdict**
  - In the light of *this* evidence, it seems that....
Descriptive & Critical Approaches

You need SOME description:
• Outline key ideas, books, theories, concepts
• Research: account of method, process, etc.

You need SOME personal reflection:
• Formal: third person (“it was found that...”)
• Tentative: (“it has been suggested”, “it could..”)

BUT always give a logical and reasoned argument:
• This follows from that; this is true because etc...
Resistances to Critical Thought

Many people find ‘being critical’ difficult because:

• Respect for the authority of ‘experts’
• Lack of confidence in own judgement
• It is hard work!
  - you need to read widely
  - gather as many different opinions as possible
  - compare and contrast these different views
  - you have to make sense of what becomes an increasingly complex & confusing set of possibilities
Strategies for ‘Being Critical’

Most difficult part is getting started:

• Any decent work of scholarship will be persuasive
  - it is the academic’s job to convince you....
• Often academic writing is full of technical jargon
  - technical jargon is an essential ‘tool of the trade’
  - jargon eases communication – speeds up exchange of ideas between other professionals
  - BUT it can also obscure: creates ‘them’ (ordinary ‘laypeople’ culture and [implied] elite ‘professionals’)
• Beginners don’t always know enough to see errors
Strategies for ‘Being Critical’

So....

• Be **suspicious**
  - know you are being had!
  - look for the rhetorical smokescreen
  - what is the author assuming is ‘obvious’; is it?

• Get a good dictionary/glossary for technical terms
  - make sure you (really) understand key terms
  - test comprehension: express ideas in *your* language
Template for Critical Thinking

Model to Generate Critical Thinking

Description

Who?
Where?
Why?

What?
When?

What next?

So What?

What if?

Analysis

Evaluation

Topic / Issue / Title

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Template for Critical Thinking

**Description**
- **What?** What is this about?
- **Where?** Where does it take place?
- **Who?** Who is this by?
- **When?** When does this occur?
- **How?** How does it work - in theory - in practice / context?

**Analysis**
- **Why?** Why did this occur? Why was that done? Why is this happening? Why is this significant? Why is this convincing? Why / why not?
  - *Possible situations and alternative responses*
  - *Implications / Solutions / Conclusions / Recommendations*
- **What if?** What if this were wrong? What are the alternatives? What if there were a problem? What if this or that factor were added / removed? What does this mean? Why is this significant? What are the implications? Is it successful? How does it meet the criteria?

**Evaluation**
- **So what?** Is this convincing? Why / why not?
  - *Implications / Solutions / Conclusions / Recommendations*
- **What next?** How and where else can it be applied? What can be learnt from it? What needs doing now?
Exercise

Try to decide which – if any! – of the following statements might be evidence-based or simple assertions

How would you test whether each statement is correct?

- My friend is the best friend on earth
- My telephone number is difficult to remember
- The deepest part of the ocean is 35,813 feet deep
- Dogs make better pets than turtles
- 85% of all cases of lung cancer are caused by smoking
- If you stretch out a Yo-yo it will be 23 inches long
- One person out of every hundred people is colour blind
- Two out of ten British citizens are Euro-sceptic
Summary: ‘Being Critical’

Ask the obvious questions...

• Where’s the **evidence** to support this idea/theory
  - will the evidence bear weight author puts on it?
  - what is the author leaving out (not telling me?)
  - how might someone else with a different view
    interpret this *same* evidence/data/information?

• Ask the ‘w’ questions:
  - who, what, why, where, when, how: & who says?

• Check for **assertions** (author simply says it’s true)

• Check for **rhetoric** – emotional ‘steers’

• Check for scholarly **reliability** of ideas/material
Summary: ‘Being Critical’

Also check:

• Have the authors explained their ideas clearly?
  - if not, why not? *Why* might they be obscure?
• Would other scholars accept this point of view?
• Has this author any reason to be biased?
• What is this author **taking for granted**
  - what do they think is ‘obvious’?
  - ‘obvious’ things are usually open to challenge
  - ‘obvious’ is a **rhetorical move** (designed to sway)
‘Being Critical’: Practical Ways in...

1. *Feel* your way into the material
   - get an overview of the topic (general reading)
   - check comprehension: do I *understand* basic ideas?

2. Go back and read more:
   - compare the views of 2 or more different academics
   - *Use* sections in books which give a critique of ideas

3. Constantly check: does this stack up?

4. Gradually move from description to analysis
   - pick away at arguments and evidence; let them ‘brew’
   - therefore give yourself *time to think* about the issues
Being Critical: Summary

Critical means: investigating, analysing, evaluating, questioning, challenging, reaching *informed* verdict.

An academic critic is: sceptical, probing, looking for alternatives, wary of *over-simplifying*.
Critical Writing

Key characteristics of critical writing include:

• a clear and confident refusal to accept the conclusions of other writers without testing the arguments and evidence provided

• a balanced presentation of reasons why the conclusions of other writers may be accepted or may need to be treated with caution

• a clear presentation of your own evidence and argument, leading to your conclusion

• a recognition of the limitations in your own evidence, argument, and conclusion
Critical Writing

Develop your own *academic* voice:

• When you engage in critical writing have a “healthy scepticism ... but not cynicism
• Be confident – but not arrogant
• Be critical ... but not judgemental or dismissive
• Express your opinion ... but without being opinionated
• Carefully examine everything the author says ... not just selective ‘random targets’
• be ‘fair’: summarise and assess *fairly* the strengths and weaknesses of other people’s ideas and writing
• Reach conclusions on the basis of considerable and careful thought about *all* the available evidence
Critical Writing: Style

- Choose a suitable format – and stick to it!
- Make the paragraph the basic unit
- Use the Active Voice
- Put statements in positive form
- Use clear, concrete, *economic* language
- Keep related ideas/people/things together
- Watch the tenses!
- Don’t overdo the emphasis
- Use the *right* word (denotation & conation)
Critical Writing: Style

• Place yourself in the background
• Write naturally – don’t overdo it....!
• Draft, revise, edit
• Listen to the *rhythm* of the writing
• Don’t overwrite or overstate
• Don’t over-qualify (e.g. this was very quickly and stunningly, obviously, incredibly put right...)
• Make links clear – but don’t *over* explain
  – Make sure logical chain follows smoothly
Critical Writing: Rhetoric

• Gentle art of **persuasion**
  – Constructing a *convincing* argument
• Much studied in the ancient world: what works?
• Considered sign of good education
• Existed in three formals
  – Judicial (language of law courts)
  – Deliberative (language of politics)
  – Epideitic (eulogy or condemnation of a person)