

# 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 **alterative 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....

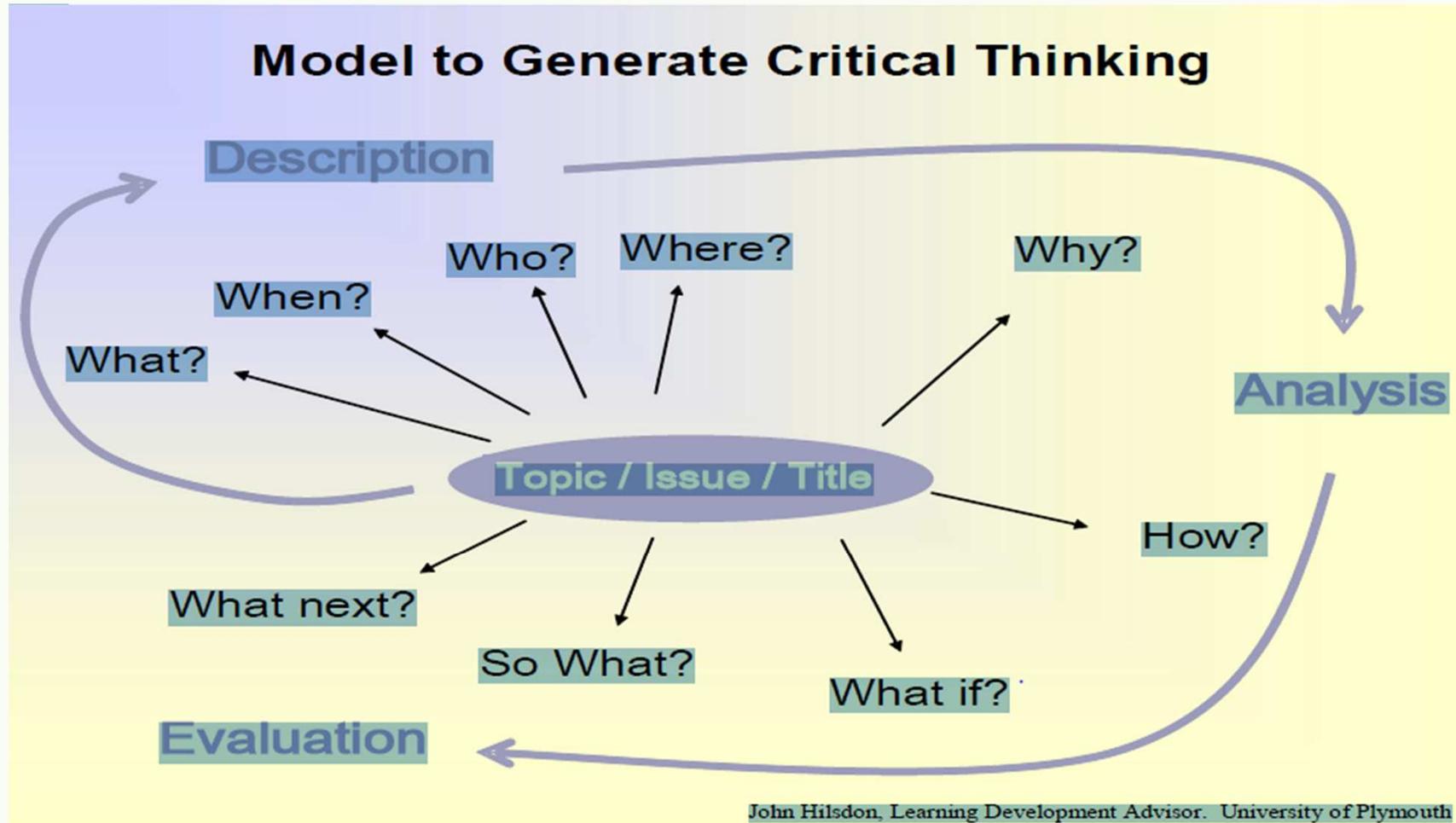
- **Be suspicious**

- know you are being had!
- look for the rhetorical smokescreen
- what is the author assuming is 'obvious'; is it?

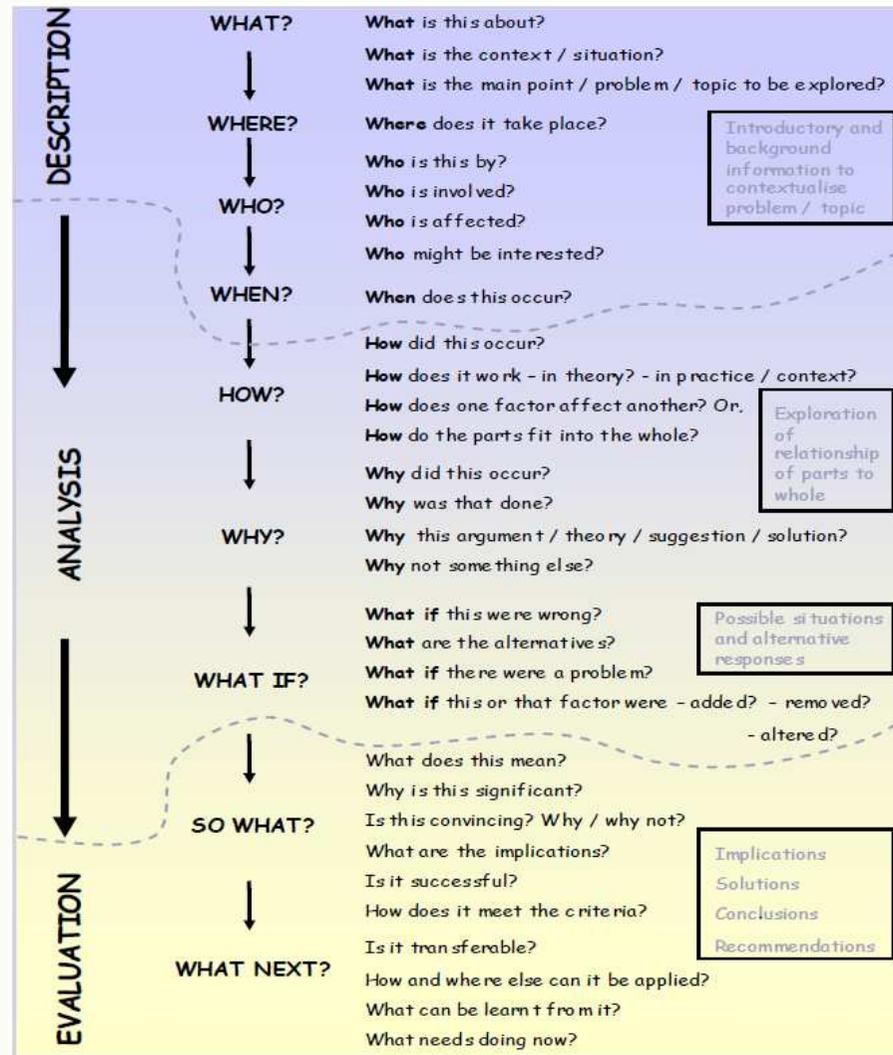
- **Get a good dictionary/glossary for technical terms**

- make sure you (really) understand key terms
- test comprehension: express ideas in *your* language

# Template for Critical Thinking



# Template for Critical Thinking



# 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 & connotation)

# 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 formal
  - Judicial (language of law courts)
  - Deliberative (language of politics)
  - Epideitic (eulogy or condemnation of a person)