

Critical, analytical thinking

As students move beyond Level 3 and 4 work to Levels 5, 6 and 7, tutors often comment that the work is too descriptive and needs to be more analytical and/or critical. This brief guide on critical/analytical thinking is based on information gathered and adapted from some of the sources listed at the end. Please consult these for further guidance.

Being analytical is about breaking things (situations, practices, problems, statements, ideas, theories, arguments) down into their component parts.

Being critical is about not accepting things at face value, but evaluating them i.e. making reasoned judgements about how valid, effective, important, relevant, useful and worthwhile they are.

Critical/analytical thinking is often associated with directed thinking, i.e. solving problems, seeking the truth and developing understanding, with the focus on a desired outcome. It involves:

- **Being open minded:**

Be aware of personal bias/prejudice in yourself and others.

Be open to new ideas.

Be prepared to consider all possibilities/viewpoints.

Be willing to reassess your own views.

Aim for balance.

- **Reflecting**

- **Evaluating:**

Identifying:

- ☐ Purpose/motivation
- ☐ Bias/vested interest
- ☐ Facts
- ☐ Opinions
- ☐ Assumptions
- ☐ Incorrect/irrelevant information
- ☐ Missing information
- ☐ Inconsistency
- ☐ Arguments (see section below on evaluating an argument)
- ☐ Supporting statements
- ☐ Counter arguments
- ☐ False statements
- ☐ False arguments

Comparing/contrasting.

Weighing up.

Making judgements.

- **Reasoning**

Thinking logically.

Developing a reasoned line of argument.

Using valid and reliable evidence.

Avoiding appeals to the emotions.

Being objective.

Asking questions:

Fundamentally, to demonstrate the analytical/critical thinking expected at the higher levels, you need to **ask lots of questions**. Some questions are fairly superficial, helping to identify the component parts of the situation, theory etc; others probe beneath the surface, looking for reasons, explanations, motives. Use this checklist of questions for all that you observe, read, hear and do:

WHO?

Developed this theory?

Is the author of this text?

Agrees/disagrees with what they say?

Do I agree/disagree with?

Published the text?

Is it aimed at?

Was involved in the incident/experience/research etc?

WHERE?

Did this information come from?

Can I find out more?

Did the incident/experience take place?

WHEN

Was this theory developed?

Was the text published?

Was the research carried out?

Did the incident/experience take place?

Is it appropriate for this action to be taken/method to be used?

Is it not appropriate?



WHY?

Does the author think/say this?

Was this research carried out?

Was this method/approach chosen?

Were other methods/approaches not chosen?

Is/was this done?

Does/did this happen?

Do/did people behave/react/feel as they do/did?

Is this important?

WHAT?

Is the author saying?

Authority/expertise/standing does he have?

Assumptions have been made?

Is he trying to make believe?

Reasons/evidence does he give?

Vested interest/bias might he have?

Information is missing?

Do others think?

Does this mean?

Other explanation/interpretation could there be?

Are the strengths/weaknesses of this argument/theory/approach?

Alternatives are there?

Usually happens?

Happened in this case?

Caused it?

Can I learn from it?

Theories apply to this situation?

Are the main factors?

Are the key issues?

HOW?

Does the author try to convince the reader?

Is the material organised?

Accurate is the information?

Is the argument developed?

Convincing is the argument?

Balanced and consistent is the argument?

Valid and reliable is the evidence/data?

Valid is the conclusion?

Does this information relate to other information?

Relevant is this theory to this particular situation?
Appropriate is this approach to different situations?

Are/were things done?
Effective is/was this approach/method?
How might things have been done differently?

Effective is this policy?

Further reading :

The Study Skills Handbook by Stella Cottrell (2003) Second edition
(See Chapter 10 for some examples of critical/analytical writing compared with examples of descriptive writing.)

Critical Thinking Skills – developing effective analysis and argument.
Stella Cottrell (2005)

Reading, Writing and Reasoning by Gavin Fairbairn and Christopher Winch (1998)