



Chapter 2: Critical Thinking and Critical Review

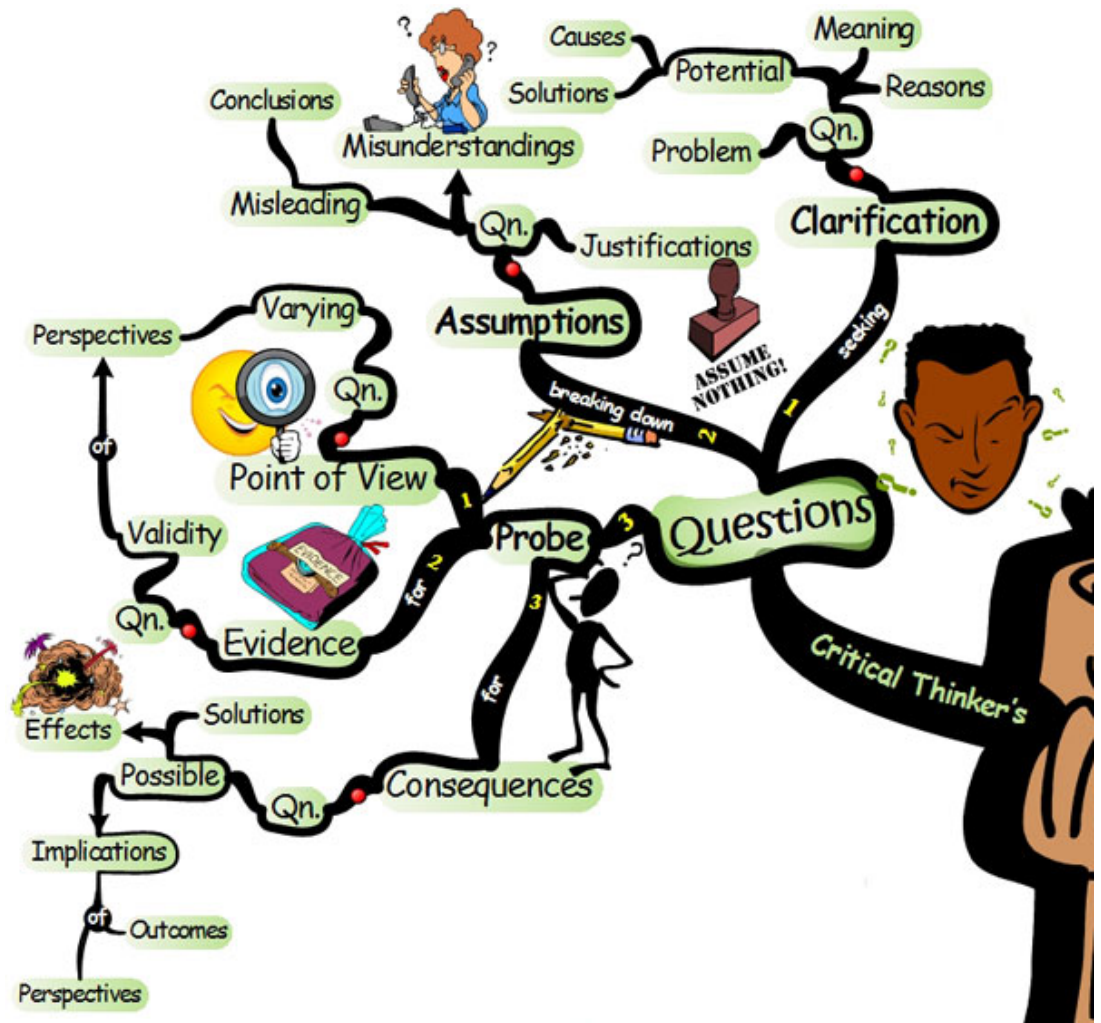
Aims

- Skills for academic practice
- Critical thinking
 - Developing a line of reasoning
 - Integrating values and ethics
- Critical Review
 - Writing your assignment
 - Checking your own work
- Ethics
 - Writing your assignment
 - Checking your own work



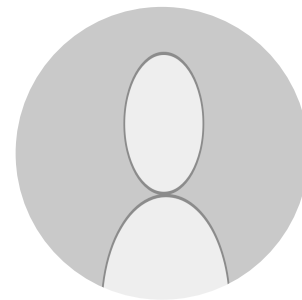
Critical Thinking

- “The important thing is not
- to stop questioning.
- Curiosity
- has its own reason for existing”
- - Albert Einstein



Skills for academic practice

- Time management
- Organisational skills
 - Critical thinking
 - Critical Review
 - Applying values and experience



Critical Thinking in Your Life

Personal Life

- What constitutes a healthy diet?
- Which investment is better for my family? Why?

Professional Life

- In what ways can we improve our product?
- How do the actions of our company affect others?
The environment?

Academic Life

- What are the main points of this text?
- Which major should I choose...why?

Spiritual Life

- How do these teachings apply to my life?
- Are there contradictions in what is being said?

Why think critically?

To do well academically, you need to show you can:

- **Identify** appropriate sources
- **Understand** key concepts and theories
- **Analyse, compare, synthesis and evaluate** information
- **Apply** evidence to your line of reasoning
- **Justify** your conclusions

Checklist for reading

Understand

- What is the text about?
- What is the line of reasoning?

Analyse

- What position is the text being written from?
- Is there valid evidence to support the points made?

Synthesise

Evaluate

- What does it add to my knowledge?
- What questions does it raise?

- How does it connect with my other knowledge, values and experience?

Critical thinking

- What topic or idea am I trying to explore?
- What do my knowledge and research tell me about the topic?
- What do my personal values tell me?
- What do social work values tell me?
- Have I taken into account:
 - Diversity and difference
 - Underlying assumptions?

What am I being asked to do?

What is being tested?	Question words	What do I need to show
Knowledge	Describe, outline, summarise	Ability to memorise and recall information/ideas
Comprehension	Compare, contrast, define, explain	Ability to understand information/ideas and present in your own words
Application	Illustrate, demonstrate	Ability to use information/ideas in different contexts
Analysis	Analyse, discuss, relate, reflect	Ability to break down and examine information/ideas and draw out themes
Synthesis	Formulate, interpret	Ability to combine information/ideas from different sources
Evaluation	Evaluate, criticise, justify	Ability to weigh up the value of information/ideas

Writing your assignment

Making a plan

- Introduction and conclusion
- Set the context
- Clear structure
- Most important points or themes

Refer back to the question

- Are you doing what has been asked?
- Are you showing your understanding of the topic?

Allow enough time



Planning

- What is the question asking me?
- Have I got all the information I need?
- How am I going to structure my assignment?

Writing

- Am I drawing on a range of appropriate sources?
- Does my introduction set out my structure and argument?
- Do I use evidence to support my line of reasoning?
- Have I considered values?
- Do I have a clear conclusion?

Checking

- Have I followed the structure I set out in my introduction?
- Does my conclusion flow logically from my argument?
- Have I checked my spelling, grammar and references?

Checklist for academic assignments

Skills You Should Cultivate

- Become an active learner
 - “Chase” answers.
 - Actively seek out solutions.
 - Go to the answer, don’t wait for it to come to you.
- Become open-minded
 - Is it possible that there are multiple correct answers?
 - You might be wrong. Why?
 - Try and approach problems from a different perspective.
- Separate Emotions from Facts
 - “Thinking” and “feeling” are not the same.
- Avoid Logical Fallacies
 - $2 + 2 = 5$. Incorrect.



Things to Keep in Mind

- Keep an open mind
 - Your perspective is yours. Others have different perspectives.
 - It is possible that you are “wrong” and that others are “right”.
 - Get comfortable with being “wrong”. Learn from it.
 - Consider many different viewpoints.
 - Accept a new explanation if it explains the evidence better and has fewer contradictions.
- Think before you act
 - Separate your feelings from the facts.
 - Am I acting because of an emotional impulse, or because it is logical?
 - Do I believe something because of the logic behind it?



Avoid Logical Fallacies

- A **logical fallacy** is a misunderstanding derived from faulty reasoning.
- Avoid contradictions between answers.
- Is your best answer a logical answer? Does it make sense?
- Example of a Logical Fallacy:
 - Hasty Generalization
 1. Cutting people with a knife is a crime.
 2. Surgeons cut people with knives.
 3. Therefore surgeons are criminals.





CRITICAL
THINKING IS NOT



DRIVEN BY
ANSWERS;



IT IS DRIVEN BY
THE



QUESTIONS THAT
YOU ASK.

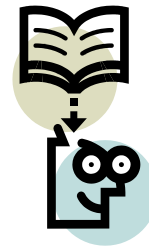
Constantly Ask Questions

- Why?
 - Why is the population increasing? Is there an abundance of deer to hunt?
- What?
 - What effect is this increase having on the deer population?
- Where?
 - Where is the population increasing? Is it all over the Upper Peninsula, or just in isolated locations?
- Who?
 - Who is affected by the increase in the population of cougars? Are the hunters affected? The wolves?
- When?
 - When did this increase begin occurring? How long will the increase continue?
- How?
 - How can we stabilize the cougar population?

•For example: Suppose you have just read an article that says that the cougar population of the Upper Peninsula is increasing.

Problem Solving System, Part I

- Reorganize
 - List the topic, issues, and main points.
 - Paraphrase.
 - Summarize.
- Understand
 - Put concepts into your own words.
 - Relate the information to what you already know.
 - Restate the information.
- Hypothesize
 - Make an interpretation of the information based on your understanding of it.
 - This interpretation will then be analyzed logically.



Problem Solving System, Part II



Analyze the information

Split the information into parts.

- Figure out how the ideas are related or connected.

Ask questions: Why? What? Where? Who? When? How?

Compare and contrast the information.



Recombine information

Using your new understanding of the material, put the parts that you analyzed back together.

Think of a puzzle...can you put the pieces back together? How do the pieces fit?



Check Hypothesis

See if your new understanding agrees with your hypothesis.

Cubing

Cubing allows you to look at a subject or problem from six different points of view.



It is an excellent exercise to illustrate how critical thinking techniques can be put into practice.



Do each of the six steps in order, and do them quickly.



Look to the next slides.

Cubing Method

Step 1: Describe (3-5 min)

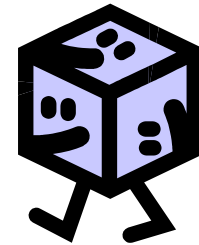
- Write in detail about the subject. What the subject looks like, feels like, etc.

Step 2: Compare/Contrast (3-5 min)

- What is similar to your subject? How are they similar?
- How does your subject differ?

Step 3: Associate (3-5 min)

- Relate the subject to some of your memories.
- What comes to mind when you think of the subject?
- This side of the cube should be very personal.



Cubing Method, cont'd.

Step 4: Analyze (3-5 min)

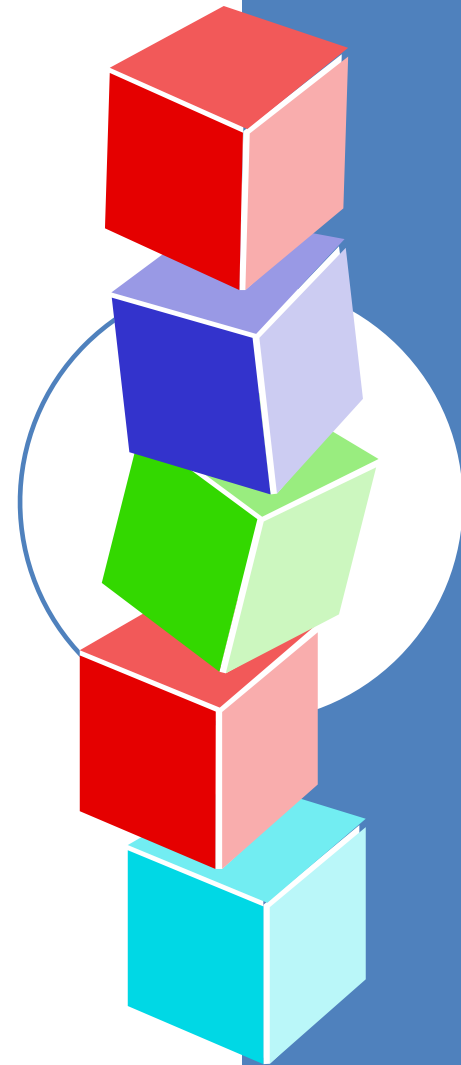
- Break the subject down into parts, and explain the significance of each.
- Interpret the meaning of the topic.

Step 5: Apply (3-5 min)

- How can you use the subject?
- Is there any way to apply this subject?

Step 6: Argue (5 min)

- Take both sides of the subject.
- Argue for the subject.
- Argue against the subject.
- Remember to keep an open mind.
- Why is this subject important?



Critical Thinking Key Words

Ideally you should always be thinking critically, however, the following words will identify when critical thinking is required. These types of words require COMPREHENSION AND UNDERSTANDING, not simple MEMORIZATION.

- Interpret
- Identify
- Outline
- Prove
- Justify
- Relate
- Summarize
- Trace

Discuss

Explain

Compare and Contrast

Critique

Evaluate

Describe

Define

Enumerate

Illustrate



Critical Review



What is a Critical Review?

a critical summary of a particular journal article is a writing task that asks you to summarize and evaluate a text (a book, a chapter, or a journal article) BUT it is not just a summary

evaluates the content and ideas of the text

provides an interpretation of the text and the analysis of *the weaknesses and strengths of the article*

requires you to read the selected text in detail and to also read other related texts

the critical review It can be of a book, a chapter, or a journal article.

PURPOSE: to provide a fair and reasonable evaluation of the selected text

What is meant by critical?

at university, to be critical
does not mean to criticize in
a negative manner



it requires students to
question the information and
opinions in a text and
present their evaluation or
judgment of the text



students should attempt to
understand the topic from
different perspectives and in
relation to the theories,
relevant research and
approaches

What is meant by evaluation?

here you decide the strengths
and weaknesses of a text

usually based on specific criteria

Evaluation requires:

- an understanding of not just the content of the text.
- an understanding of a text's purpose.
- the intended audience
- why it is structured the way it is.

Points to Consider Before Reading the Journal Article



WHEN YOU READ THE TITLE, TRY TO UNDERSTAND WHAT IT IS ABOUT → THE TITLE GIVES A GIST OF WHAT IT IS GOING TO BE ABOUT.



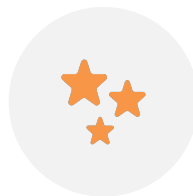
PAY ATTENTION TO THE STRUCTURE OF THE TEXT AND SEE THE SUB-HEADINGS CLOSELY



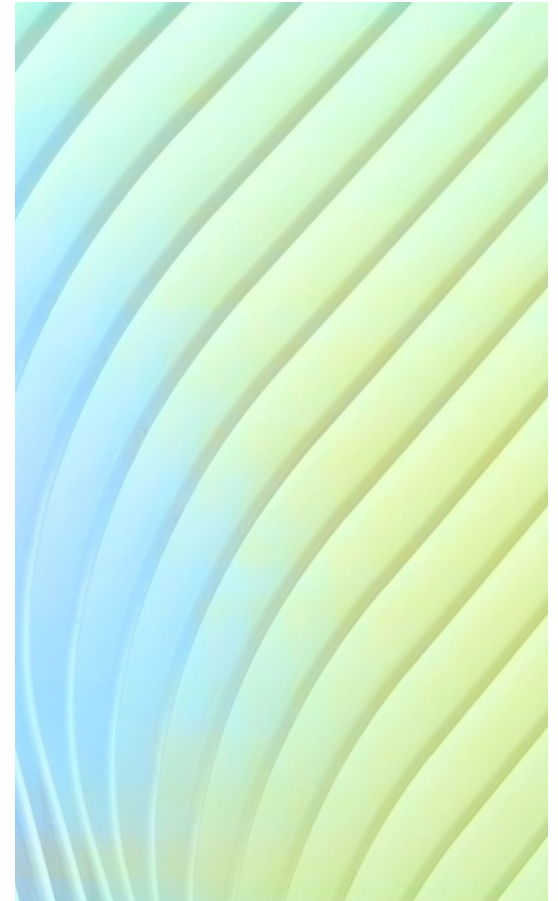
READ THE ABSTRACT TO GET AN IDEA OF WHAT THE TEXT IS ABOUT → THE ABSTRACT IS BASICALLY A SUMMARY WHICH WILL GIVE YOU AN IDEA



SEE THE REFERENCES TO GET AN IDEA ABOUT WHAT SOURCES HAS THE AUTHOR USED AND ARE THEY RELEVANT FOR THE STUDY?



ADDITIONAL: CHECK IF THE AUTHOR IS LISTED SOMEWHERE ON THE WEB. HAS HE MADE AN OUTSTANDING CONTRIBUTION TO THE PARTICULAR STUDY?



Structure: The basic guidelines

- Short critical reviews (one page) and long critical reviews (four pages), usually have a similar structure
 - Introduction
 - Summary
 - Critique
 - Conclusion
 - References



Introduction

the length of an introduction is usually one paragraph

your text should begin with the citation of the journal – use the APA format (you can use the online citation format generator) - the author(s) and the title

- 1. Briefly explain the topic of the text
- 2. Include a statement of the thesis
- 3. Present the aim of the text and summarize the main finding
 - or key argument
- 4. Include the author's contribution to the field and his
 - reputation to the industry + what he/she does

5. Conclude the introduction with a brief statement of your

evaluation of the text(positive/negative or mixed)

Summary

present a summary of the key points along with a limited number of examples

you can also briefly explain the author's purpose/intentions throughout the text and you may briefly describe how the text is organized

the summary should only make up about a third of the critical review

Conclusion

this is usually a very short paragraph

restate your overall opinion of the text

briefly present recommendations

If necessary some further qualification or explanation of your judgment can be included.

this can help your critique sound fair and reasonable



References

- If you have used other sources in your review you should also include a list of references at the end of the review

Summarizing for the critical review

- Summarizing and paraphrasing are essential skills for academic writing and in particular, the critical review.
- To summarize means to reduce a text to its main points and its most important ideas.
- The length of your summary for a critical review should only be about one quarter to one third of the whole critical review.

The best way to summarize is to:

1. Scan the text. Look for information that can be deduced from the introduction, conclusion and the title and headings. What do these tell you about the main points of the article?
2. Locate the topic sentences and highlight the main points as you read.
3. Reread the text and make separate notes of the main points. Examples and evidence do not need to be included at this stage. Usually they are used selectively in your critique.

Paraphrasing

- Paraphrasing means putting it into your own words.
- Paraphrasing offers an alternative to using direct quotations in your summary (and the critique) and can be an efficient way to integrate your summary notes.

The best way to paraphrase is to:

1. Review your summary notes
2. Rewrite them in your own words and in complete sentences
3. Use reporting verbs and phrases (ex; The author describes..., Smith argues that ...).
4. If you include unique or specialist phrases from the text, use quotation marks.

Values and ethics

Issues of values and ethics:

- Working with conflicting interests and competing rights
 - Having a role to support, protect and empower people, as well as having statutory duties and other obligations that may be coercive and restrict people's freedoms
 - Being constrained by the availability of resources and institutional policies in society
- 



Values and ethics in academic work

- Show awareness of conflicts of values and ethics
- Draw on personal and professional values and experience
- Think critically about these values and how they can help to understand and explore the situation
- Draw on service user perspectives



Some Final Tips...

- Use the techniques found in this presentation to develop your own strategies for critical thinking.
- Tailor the concepts to fit your needs. There is no “one size fits all” approach, and every technique may not work for each of your courses.
- Create the “this size fits you” approach to developing your critical thinking.
- How you apply the concepts to your coursework is your decision.