

## Critical Thinking

Here are two ways to approach Critical Thinking: (1) Step by step or (2) Using key elements

### Model 1: Step-by-Step

1. Identify **key choices** which have been made
2. Look for **alternatives** to those choices
3. Develop a **point of view** on those alternatives
4. Find **evidence** for your point of view

For example

1. *What are some key choices made by the author?*
  - The methodology is quantitative
  - The theoretical framework is by Smith
2. *What are some alternatives to these choices?*
  - Methodology could have been qualitative
  - Jones' theoretical framework could have been used instead
3. *What is my point of view? (List both positives and negatives for the alternatives and choices).*
  - Qualitative questionnaires would allow for more depth of informative.
  - Quantitative surveys can be a bit impersonal (although anonymous)
  - Jones' theoretical framework is beneficial, although more controversial
4. *Where can I find evidence to support my point of view?*
  - ? Find articles where authors critique quantitative methodology.
  - ? Find studies that use Jones' framework.

The steps do not need to be carried out in this order. These are general guidelines to simplify the process.

### Model 2: Using Key Elements

*These are the key elements:*

- Purpose (of research, of article, of theory)
- Information / data collected
- Concepts / theoretical framework
- Point of view / position / interpretation / evaluation / recommendations
- Implications / consequences
- Assumptions

There may be other key elements depending on your focus (e.g. sample size, method of analysis, text structure, etc).

*Critical questions you can ask about key elements:*

- **What is it like?** (e.g. What is the purpose? What information was collected? What are the concepts used? etc)
- **Why is it like that?** (e.g. Why is that their purpose? Why do they assume that?)
- **How good is it?** (e.g. How useful / relevant / innovative / fair / logical / up-to-date / cost effective... etc. is the purpose / theory / interpretation)

- **Whose choice is it?** (e.g. the author's, other researchers who are reported, everyone in the discipline)