

## Critical Thinking

### What is critical thinking?

Critical thinking refers to adopting a questioning mindset when encountering new knowledge and information, and when writing about a topic or creating new knowledge through a research project.

### Why think critically?

Critical thinking is important in tertiary education, as when students learn and create new knowledge, they need to be sure that it is based on credible, valid, and reliable information, and that research has used robust methodologies.

Thinking critically is a skill developed during undergraduate study and is expected of all postgraduate students. Writing a critical analysis requires students to evaluate, analyse, and interpret research using facts to support their argument or position.

### When is critical thinking applied?

#### Think Critically About Information Sources

- 1. What is the background?**
  - Who is the author
  - What type of text is it?
  - Who is the intended reader?
- 2. What is the purpose?**
  - What is the author trying to convince you of?
  - How is the text structured (headings, tables, etc.)?
- 3. What evidence is offered to support the argument?**
  - Is the evidence accurate and relevant?
- 4. Is the argument logical?**
  - Are key terms and concepts defined?
  - Do the points flow logically from one to the next?
  - Does the conclusion accurately flow from the evidence?

In addition to answering the above questions, a critical examination of research articles used for assignments should be guided by the following critical analysis prompts.

## Research Studies

### 1. General overview

- Is the article describing a research project?
- Is the research method clearly described?
- Is the research clearly qualitative or quantitative?
- What were the aims of the research project? Does the title clearly reflect the focus of the text?

### 2. Research design

- How is the published literature used to support the study?
- What is the theoretical framework and is it appropriate for the research topic?
- What is the methodology?
- How was the data collected?
- Are the method, data collection, and data analysis strategies appropriate for the research topic?
- Have the Treaty of Waitangi principles been adequately addressed in the design?

### 3. Participants

- What selection method was used?
- How was confidentiality and/or anonymity assured?
- What ethical issues were identified and how were they addressed?

### 4. Research question and data analysis

- How does the research question relate to the literature in the literature review?
- Can the data analysis strategies be easily identified and followed?

### 5. The findings and discussion

- Is it clear how the findings have been generated from the data?
- Is it clear how the findings relate to theoretical perspectives?
- Does the evidence support the conclusions?
- Are the links between the findings in this research and other research clearly made?

### 6. The role of the researcher

- Are the researchers' biases, assumptions and expectations made clear?
- Are the limitations of the study made clear? Can you think of other limitations that should have been acknowledged?
- What recommendations for further study are made?

### 7. Making the links between different texts

- How does this study's findings relate to other texts in your reference list?
- Which other studies confirm these findings?
- Which other studies contradict these findings?

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