Critical thinking

Critical thinking is required at university to achieve the high grades at undergraduate level. It demonstrates that you can evaluate academic research.

What is critical thinking?

MacMillan & Weyers (2011:77) define the terms ‘critical’ and ‘thinking’ as:

“making a careful judgement after balanced consideration of all aspects of a topic”
“the act or process of knowing”

Therefore, critical thinking is about questioning your knowledge as well as the findings of the research you undertake, to find the evidence that supports the view you currently hold or are presented with.

As noted by Cottrell (2019), critical thinking is a complex process that starts with critical reading and ends with critical writing. It involves:

- identifying the research of experts in your subject area
- questioning the validity of their research, for example, by evaluating the research methodologies used and the interpretation of findings.
- appraising the resources which they have relied upon
- checking to see whether other experts in the field agree or disagree with the findings
- recognising whether there are any omissions from the research and making judgements about how this may have affected the outcome
- reflecting on the issues you have uncovered
- drawing conclusions from your evaluation
- presenting a point of view that is justified using the evidence you have found

How to think critically

1. Evaluate the literature you find

   You should not accept the findings of others without questioning them first to ensure the source of your information is academically valid.

   For example:

   1. Who is this author?
   2. What credibility does this author have in this subject area?
   3. How has this author arrived at their conclusion(s)?
   4. Are the aim and objectives clear and have they been met?
   5. Has the most appropriate research methodology been used?
   6. Is there any bias in this work?

In Health subjects, such as Nursing and Midwifery, tools are available to help you to appraise the research you are reading. These include ‘The Critical Appraisal Skills Programme’ (CASP) (2020) checklists and the Critical Appraisal Tools from the ‘Centre for Evidence-Based Medicine’ (CEBM) (2020). Health subjects require stringent critical appraisal as lives are at risk however, critical appraisal skills and objectivity should be developed within all university courses of study.
2. Do the experts agree or disagree?
University is about challenging expert views and opinions as well as your own. You need to find where the weight of expert agreement lies. To do this you need to research widely and find as much evidence as you can. Once you have found the publications, you need to consider their age and place them into chronological order starting with the oldest. For example, research undertaken in 1960 cannot possibly agree with research carried out in 2020. It must be the 2020 research which agrees or not with the 1960 work. Start with the oldest work then read to see whether the younger research agrees, disagrees, or builds upon the findings. Once you have done this you should be able to see where the greatest weight of evidence lies. If you spot an area which seems to require further research, then point this out in your writing. You can only be faulted by your tutor if you have not undertaken sufficient research and you have missed some resources which may alter this weight of agreement or disagreement.

3. Do not describe what you have read
As every word in your assignment counts, you should not describe the resources you have read. Use them to present the findings and the weight of evidence that justifies the argument you are making. If you find yourself describing a text, ask yourself why you are doing so and whether it is necessary for the reader. Provided your referencing is correct, the reader can verify the information you provide. It is the finding as and the accuracy of the research which is important.

4. Critically evaluate your own writing
Have I:
• stated the aim (brief) and objectives (learning outcomes) for my work?
• logically structured my work to reflect the aim and objectives?
• written a conclusion that draws together the arguments I have made?
• addressed my aim(s) in the conclusion or answered the question set?
• outlined areas for further research when evidence is unclear?
• used texts and research that are appropriate, reliable, and up-to-date?
• provided up-to date and accurate facts and statistics?
• presented my arguments in a logical order?
• justified my arguments by providing a weight of evidence?
• ensured I have informed judgements and these are not based upon my personal beliefs?
• checked my arguments for inconsistencies?
• provided examples in support of the theories and models I have referred to?
• avoided anecdotal and possibly biased information?
• ensured that I can defend the inclusion of any descriptive summaries I have written?
• written in an academically appropriate way?
• written precisely and concisely or are my sentences wordy and rambling?
• checked my grammar, spelling and punctuation?