

Thinking Critically

Chapman Learning Commons



Introduction

At university ‘critical thinking’ or the ability to analyze and assess information, is vital in all courses. Coursework is not memorizing content for exams. Instead, it is engaging in active learning by questioning and connecting ideas.

Can you learn to think better? Yes, you can! Critical thinking is a skill practiced over time. Let’s go over some tips for practicing critical thinking.

1. Connect to Previous Learning

Simply acquiring knowledge is the first step in understanding a topic. For deeper learning, we have to apply *and* connect that information to prior knowledge. For example, when I took CAPS 301, a human physiology class, the best way for me to study for exams was to make connections between different modules. To illustrate, to tie lung function to the urinary system, I would consider how lung function affects blood PH and any impacts this might have on the urinary system.

While studying, go beyond bulleted lists or simply reading notes. Practice active learning by using mind maps, pro-con lists, short reflections, and diagrams.

Ask yourself, where else you might have seen or heard about the topic. How does it relate to the themes of the course?

2. Question and Assess Information

When I’m doing research for a school project, I often come across articles with strong claims but not enough evidence to back them up. For instance, in my fourth year, I had to create a public health project about healthcare in remote parts of Canada. The top Google results were informative, but lacked solid evidence, making them unsuitable for citing. Some even turned out to be based on false information. This is why it’s important to question and evaluate information before trusting or sharing it.

Consider the source of the information, and whether they are qualified to make the claims. Here is how I check if my sources are trustworthy:

- Is the information from a credible website or peer-reviewed journal? For example, I would trust a government website more than a blog.
- Does the article include any citations? Do the citations the source uses support what is being said, and can we trust those citations?
- Check the date! Is the article recent? If not, is there a more up-to-date source?

3. Challenge Assumptions

After confirming that the information is reliable, question the assumptions that support it.

- Are the assumptions supporting the claims based on facts or opinions? For example, it's factual to say regular exercise benefits health, but claiming that yoga is the best form of exercise is an opinion.
- Are all the facts presented in a truthful unbiased way? It would be untrue for an exercise company to claim 1 minute of daily exercise can cure all illnesses because exercise is good for health.
- Is there any chance of bias (like the person or group sharing the information benefiting from it)? For instance, a yoga company sponsoring research on yoga being the best form of exercise is biased.

Consider challenging or opposing views. Do they make reasonable claims? And if yes, does that change your mindset?

4. Form Logical Conclusions and Discuss them

Lastly, summarize new learning in a way that makes sense to you. Teach the information to a friend and see if they understand the concepts. If not, do they bring up points that lead you to reconsider your learning? We grow in critical thinking by sharing our thoughts and discussing them together!

This video is part of one of many student toolkits created by the Chapman Learning Commons at the University of British Columbia. To learn more about ways to excel at university, take a look through the Learning Commons website at learningcommons.ubc.ca or visit our Chapman Learning Commons Help Desk on the third floor of the Irving K. Barber Learning Center.