CRITICAL THINKING

In the age of Artificial Intelligence

Liberty University
Online Writing Center

INTRODUCTION

Critical thinking is not a process relegated only to the world of academics. Critical thinking skills are used in many of a person's daily tasks.

Asking, "Is this news legit, or did my uncle just get creative with Photoshop again?"

Negotiating who takes out the trash without starting World War III.

Deciding between a week of fancy lattes or actually paying your phone bill on time.

Choosing between slow campus Wi-Fi or buying another overpriced coffee at the café with faster internet.

Deciding if you should carry the team or risk letting Chad "forget" his part again.

Weighing whether the mystery meat is worth the swipe or if cereal-for-dinner is the safer bet.

When applied to academic writing, critical thinking is essential.

WHY CRITICAL THINKING MATTERS

AI tools like ChatGPT, Grammarly, and Copilot can either enhance your critical thinking skills or weaken them, and you must exercise intentional judgment in how you engage with these tools. Roman Yavich (2025) evaluated AI-supported environments and found a positive correlation between the use of AI tools and a student's critical thinking skills. However, he also noted that "without sufficient digital literacy and critical thinking skills on the students' part, the same system can be reduced to a mere tool for copying and replacing intellectual activity" (Yavich, 2025, p. 16).

Yavich, R. (2025). Will the use of AI undermine students' independent thinking? *Education Sciences*, (15)6. https://doi.org/10.3390/educsci15060669

Below are some good reasons to involve critical thinking in the writing process.
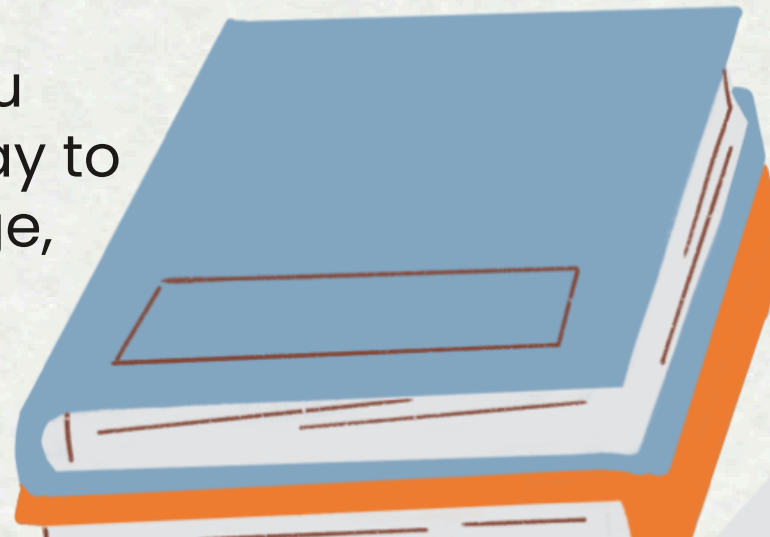
WHAT DOES CRITICAL THINKING DO?

It Forces You to Engage with Course Materials Directly

Engaging with your course materials directly gives you a vested interest in the outcome. Reading, analyzing, and responding to assigned texts is an irreplaceable part of critical academic work, and AI cannot form original insights based on your unique perspective or context. Don't forget that learning should be engaging even though it requires effort and challenge, and human thought should be involved in both the input and the output of any work you submit.

It Encourages You to Maintain Authorship

AI tools can offer helpful starting points, but they cannot evaluate truth, relevance, context, or ethics. They can offer results that are superficial, inaccurate, or ethically questionable. Critical thinking forces you to pursue a deeper understanding of the realities of a given topic. As a student, you should partner with AI in a meaningful way to ensure you are using AI to your advantage, not to your detriment.

It Causes You to Reflect on How You Think

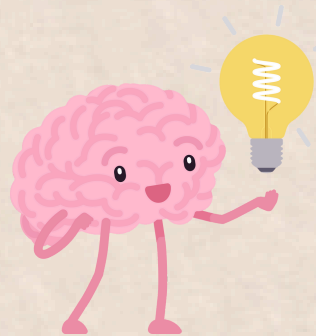Be sure to take the time to ask yourself questions like:
- Why am I making this argument?
- What evidence supports it?
- What assumptions am I making?

AI should be used to challenge your thinking, not do the thinking for you. AI can guide student work, but it should not be student work.

THE NEGATIVE SIDE OF AI

It Encourages Passive Consumption
When students accept AI-generated content without questioning its accuracy, it discourages curiosity, skepticism, and the habit of verifying information, all key components of critical thinking.

It Undermines Deep Engagement
When AI summarizes content, it replaces a student's need to read, interpret, or wrestle with complex ideas, resulting in shallow engagement that leads to weaker comprehension, analysis, and original insight.
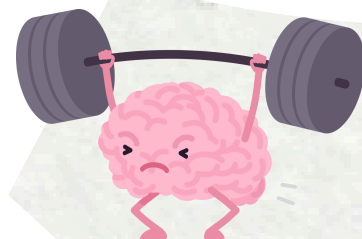
It Promotes Overreliance on Machine Answers
When students use AI to instantly generate answers or arguments instead of developing their own reasoning, the habit of thinking through problems diminishes, and students lose confidence in their ability to solve problems independently.
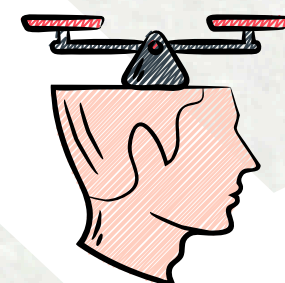
It Inhibits Intellectual Confidence
When students believe AI writes better than they do, they may rely on it out of insecurity, which leads to a lack of motivation to grow, revise, or take creative risks in thinking and writing.

It Weakens Ethical Reasoning
When students use AI to avoid effort or neglect necessary engagement with their content, it can normalize shortcuts and undermine academic ethics.

CHOOSE WISELY

When you choose to start with AI rather than use it as a learning tool, you shortcut the learning process. It is the process of getting there that develops your critical thinking skills and gives you mastery over your subject matter. Your initial experience with AI can leave you with a false sense of mastery over the material, mistaking the clarity of AI's output for your own understanding.

There is more to the work than just the final product.

Critical thinking is one of the most valuable skills you will develop in your education. It applies beyond writing to your career, relationships, and decision-making.

When used without restraint, AI can dull the very skills that education is meant to develop: analysis, reflection, independent thought, and ethical reasoning. The key is not to ban AI, but to teach you to use it responsibly, transparently, and with active critical engagement so it becomes a tool for thinking, not a replacement for it.