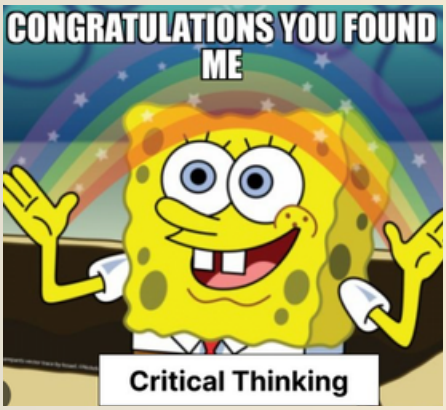
Critical Thinking!

or

How to Make the Learning Process Visible in Teaching and Prevent the Overuse of Generative AI



Critical thinking—which its pioneer **John Dewey** (1910) defined as "**active, persistent, and careful consideration** of any belief or supposed form of knowledge in the light of the grounds that support it"—is the cornerstone of higher education. A student who thinks critically is actively engaged; it is a **demanding activity requiring focus, effort, and perseverance**. Today, by contrast, language models can generate outputs in a matter of seconds—whether it is a reflection, summary, essay, or an entire thesis (though that takes a few more seconds). Naturally, we worry that future generations will lose the ability to focus, lack perseverance, and skip the (critical) thinking process altogether.

How, then, can we contribute to developing these skills in our students while boosting their confidence in their own abilities? How can we encourage them to rely less on easily obtained AI outputs and more on themselves?

By making the learning process visible, we not only find answers to these questions but also obtain relevant grounds for assessing their work and progress.

Here are three tips on how to work with critical thinking in teaching:

METHOD	TRADITIONAL APPROACH	APPROACH EMPHASIZING CRITICAL THINKING
Rearview Mirror	The student submits a 5-page essay on the given topic.	The student submits not only the essay, but also a page of reflection describing which prompts they gave to the AI and why; which AI responses they evaluated as incorrect or superficial and rejected, and which ones they used instead; as well as their own reasoning that the AI was unable to provide.
Process scaffolding	The student is evaluated after submitting the finished work.	The student submits a mind map and a justification for their chosen hypothesis, is invited to discuss sources and their credibility, and finally submits a synthesis of findings.
Oral Defense	The student submits the work and receives a written evaluation.	The student (individually or in pairs/trios) attends an oral consultation where they defend specific parts of their work and respond to contextual questions.

If, in the age of AI, **we consciously integrate the process of critical thinking, reflection, and deliberation into our teaching**, we demonstrate that as educators we are aware of the challenges brought by generative artificial intelligence and are not intimidated by them. At the same time, **we show our students that we value their work and their judgment, and that they are responsible for their own learning.** And cultivating human thinking, reason, and responsibility is the most valuable thing academia can offer in the era of artificial intelligence.

How do you implement critical thinking in your teaching? Let us know at **pedagog.cjpp@fsv.cuni.cz**