

Assessment for Learning in the Age of AI: Promoting Critical Thinking and Academic Integrity



The Issue

- Many faculty members are currently facing the realization that *they can no longer assess students or learning the way they used to before the emergence of Generative AI (GAI)*. Traditional assessments, such as essays, reports, projects, and take-home tasks, are now easily producible by AI tools, threatening both academic integrity and the authenticity of learning.
- The suggested good practice below addresses that challenge by redesigning assessments to promote critical thinking, originality, and ethical use of AI.



Best practices

- Seamless integration between DDDM and GAI tools. That is, use GAI (ChatGPT, Gemini, or Copilot) in the execution of assignments.
- Assessment of Learning Processes. The process is as important as the product or the outcome.
- In-class Performance Assessments.



Case Studies

Activity1: Formative Assessment

Within-process Strategies

1. Prompt-Process-Reflection (PPR) Journals

Assessment: Require students to document:

- . Why and how ChatGPT was used
- . The **prompts** they used with ChatGPT,
- . The reasoning behind each prompt,
- How they refined outputs, validated data, and what decisions they made.

Case Studies

Within-process Strategies

Section	Student Entry
Task Objective	15it
Initial Prompt to ChatGPT	nive
Why This Prompt?	ie
ChatGPT Output Summary	60%
Evaluation	-2013 10 MB
Reflection	

Criteria	Excellent (2)	Satisfactory (1)	Needs Improvement (0)
Clarity of Task Objective	Clear and relevant	Vague	Missing
Prompt Quality	Thoughtful and well- targeted	Acceptable	Poor or copied
Justification of Prompt	Shows reasoning and intent	Basic justification	No justification
Evaluation of Output	Critical and evidence- based	Minimal critique	Blind acceptance
Depth of Reflection	Insightful and linked to learning	General	Superficial



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Activity1: Formative Assessment

Within-process Strategies

2. Comparison Assignments: With vs. Without Al Assessment: Students complete the same task twice once independently and once with ChatGPT's help. Then, they:

- Compare the two processes
- Reflect on what AI added (or missed)
- Evaluate reliability and integrity

Purpose: Measures students' ability to evaluate AI critically and understand its limits and affordances in decision-making.

Case Studies

Activity1: Formative Assessment

Within-process Strategies®

3. Real-Time Think-Aloud Assessment

Assessment: In class, ask students to solve a data-based problem while verbalizing their thinking. If they use ChatGPT, they must explain:

- What they're asking
- Why they're asking it
- How they're evaluating the answer

Purpose: Provides insight into students' reasoning, questioning skills, and AI literacy as part of the learning process.



Challenges

- 1. Over-Reliance on Al Output
- 2. Prompt Engineering Skill Gaps
- 3. Ethical and Academic Integrity Concerns



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Recommendation

- 1. 1. Teach AI Literacy
- 2. Focus on Higher-order Thinking
- 3. Use Rubrics that value Reflection
- 4. Promote Human-Al Collaboration

