A Quickstart Guide to Thinking about AI in your Course

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Reconsidering your Learning Goals





Redesigning your Assessments & Classroom Practices

RE your outcomes for learning (goals):

If A - you are all set!

If B: You have 3 choices:

- Change your course goals so that they are in the "A" category and change your assignments to align with your new goals
- 2. Keep your goals but change your assignments
- 3. Keep your goals AND your assignments



GAI-aware make-overs [B.2]

Writing-specific examples are from Annette Vee's post, <u>AI Aware Teaching Examples</u>, in AI & How We Teach Writing.

Assignment	Why this Assignment?	AI Resistant Modification	AI Leveraged Modification			
Writing - Intensive Courses						
Annotated bibliography	Provides practice finding and evaluating sources;	Construct an <u>I-Search</u> narrative about their research process, describing why they chose a topic, how they began their search, who they talked to, what threads they followed and why, what questions remain for them, etc.	Pose research question to an LLM - w/specified prompt characteristics & constraints, then ask students to evaluate sources for: quality, veracity, completeness, etc			
[Al can do this]	that uses sources to make an argument.					
		Ask students to prepare for research by making a list of what they don't know about a topic, what they want to know, and what they can't know about a topic. You could ask students to begin that list in class, minimizing distractions and temptations of Al.				
Reading response	Holds students accountable for doing their assigned reading;	De-emphasize the written product and shift the work to in-class creation and	Have students interact with a text using Al <i>before</i> assigning it.			
[Al can do this]Allows students to interact /work with each other;discussion.Motivates prep for a discussion in class.The Paranoid memorandum (Jo Crider, Texas)Motivates prep for a discussion in class.Ask students to break into group work on a brief writing assignme with a detailed, specific prompt.	discussion. <u>The Paranoid memorandum</u> (Jason Crider, Texas)	Let students know they'll be working with a particular text in class, but tell them not to read it yet.				
	Motivates prep for a discussion in class.	Ask students to break into groups to work on a brief writing assignment - with a detailed, specific prompt.	In class, give students ~10 minutes to ask an AI anything they want to know about the text: a summary, which texts			
		Each group is given an instruction to	or debates it engages with, how it connects to concepts in class, etc.			

		either use AI or not use AI in completing the assignment. Groups then share their work with the entire class and guess whether each group used AI or not. The trick is that all of the groups are assigned to not use AI (only works once) <i>N.b.</i> , Crider's acceptable use policy is shared at the link above.	Then, run a discussion about what they learned about the text, and what further questions they have. Finally, assign students to read the text themselves prior to the next class' discussion of the text See, Matt Burton's <u>Writing Machines Syllabus</u>	
<i>Reflections</i> [Al can do this]	Encourages students to make personal connections in their writing; Fosters metacognition re insights and frustrations in the writing /thinking process.	In class, have students annotate their own work or do pen-and-paper brainstorming: How they feel when writing this assignment; What challenges they encountered; What they learned. Alternatively, have students interview each other about their approach to the assignment.	Have students do a human vs. machine contest, where they try to make the most human reflection using AI, then test it out on each other. Which part was done by AI? How can they tell? What did they learn from this exercise and what didn't they learn?	
STEM Courses				
Problem sets [Al can do these]	Repeated opportunities to solve challenging problems help to build students' understanding of material and general problem solving skills	Option 1 - Provide time for students to begin the problem set in class, without access to GAI/web resources. Have students reflect on difficulties Address student questions/errors <i>in</i> <i>situ</i> .	Remove in-class work on pset Tell students they may use AI, and require them to evaluate responses/use. Use weekly in-class quizzes to ensure that students are engaging with material.	

		Document student progress.			
		Allow them to complete work at home with access to the web.			
		Ask students to reflect on/report how if/they used AI			
		Use weekly in-class quizzes to ensure that students are engaging with material.			
Solution/ Example Analysis	Students need to learn how to critically review examples and solutions (from texts or elsewhere).	Present students with problem solutions that have varying types of errors (logic, numeric, etc.). It's preferable if the errors result from common misconceptions. Ask students to work through these: first on their own, then in groups. The Jigsaw format works well. Debrief to expose common misconceptions.	For one of the problem set questions (or another question) ask students to use GAI to produce a solution. Then have them critically evaluate the answer. Students must explain their assessment of the accuracy of the problem - and include any prompts they used.		
Computer Programming / Coding					
Pseudo-code	Helps students learn to clearly articulate what they want their code to accomplish.	Provide a prompt for a small piece of code and ask students to draft pseudo-code in class (w/out GAI).	In class or as HW, ask students to input their optimized pseudo code into an LLM.		
	May help students to create more efficient code	Have students pair up and read/provide feedback on partners' code. Is it correct? Can it be optimized?	Ask students to evaluate the code generated, and iterate on the prompt (or edit the LLM output). Require that students submit all interactions with the LLM.		

Al Assessment Scale (Updated), Leon Furze

1	NO AI	The assessment is completed entirely without AI assistance in a controlled environment, ensuring that students rely solely on their existing knowledge, understanding, and skills You must not use AI at any point during the assessment. You must demonstrate your core skills and knowledge.
2	AI PLANNING	Al may be used for pre-task activities such as brainstorming, outlining and initial research. This level focuses on the effective use of Al for planning, synthesis, and ideation, but assessments should emphasise the ability to develop and refine these ideas independently. You may use Al for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.
3	AI COLLABORATION	Al may be used to help complete the task, including idea generation, drafting, feedback, and refinement. Students should critically evaluate and modify the Al suggested outputs, demonstrating their understanding. You may use Al to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any Al-generated content you use.
4	FULL AI	Al may be used to complete any elements of the task, with students directing Al to achieve the assessment goals. Assessments at this level may also require engagement with Al to achieve goals and solve problems. You may use Al extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing Al to achieve your goals while demonstrating your critical thinking.
5	AI EXPLORATION	Al is used creatively to enhance problem-solving, generate novel insights, or develop innovative solutions to solve problems. Students and educators co-design assessments to explore unique AI applications within the field of study. You should use AI creatively to solve the task, potentially co-designing new approaches with your instructor.

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Perkins, Furze, Roe & MacVaugh (2024). The AI Assessment Scale

Articulating your Al-use Policy

Articulate your policy, your rationale and expectations/consequences the use of AI in your course. Consider the state of <u>AI detection software</u>.

Transparency makes teaching & learning expectations visible

Clearly communicate purpose of teaching practices, norms, expectations, & evaluation criteria

Facilitate transparent conversations about WHY certain policies make sense given course learning outcomes

Digital Education Council Global (2024)

Tips for an Effective AI Syllabus Policy

- 1. If AI is prohibited or required, explain why.
- 2. Connect AI use to something familiar (e.g., getting help from a friend or tutor).
- 3. Provide examples of acceptable and/or unacceptable use.
- 4. Acknowledge ethical issues such as data privacy, bias, inaccuracy, intellectual property violations, environmental impact, etc.
- 5. Note your AI documentation and citation requirements. This might include screenshots, transcripts, documents with "track changes" enabled, and/or relevant citation or disclosure guidelines:
 - APA AI citations guidelines
 - MLA AI citation guidelines
 - Al Disclosure Framework
- 6. Explain how misuse will be addressed.
- 7. Encourage students to ask questions if your policy is unclear.

From <u>Daniel Stanford:</u> The Best Al Syllabus Policies I've Seen So Far

For additional resources for syllabus statements, see $\underline{\text{this}}$ doc.

GAI Decision Tree



Additional Resources

For an extreme example of testing Al's ability to complete assignments, see <u>Andrew Maynard's</u> (ASU) recent post, where he used OpenAl's new Deep Research tool to write a PhD Dissertation.

For resources on AI Detection tools, see this document from TLL

For resources on redesigning assignments to make them more "Al aware", see the Additional Resources section of TLL's <u>Generative Al and Your Course page</u>