

Approaching Assignment Design in Light of Artificial Intelligence I

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Session web page



<https://go.osu.edu/ai-assignments>

Create a painting of a diverse medium sized group of college professors wearing aviator sunglasses working around computers.

A medium sized diverse group of college professors collaborating on work around a computer. They are wearing aviator sunglasses and have different ethnicities and genders. They are sitting or standing near a large monitor that displays some graphs and charts. They look engaged and focused on their task.



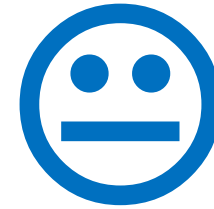
Think of a course you are teaching or will teach.

Where would you add or modify an assignment to include GenAI ?



Introductions

How are you feeling about teaching and learning in light of AI today?



Outcomes

- For a given assignment/activity, identify the critical points of intersection between the affordances and limitations of AI and the learning goals/needs of students.
- Craft an assignment/activity in their own discipline that they can use in a course design, whether current or in the future.
- Incorporate transparent and clear direction about approaching and completing the assignment/activity.



OTDI Update

Alison Landefeld

Communications Strategist, OTDI





Cues and clues

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Objective: Cues and Clues













Introduce a set of methods to:

- Analyze your course to identify crucial elements of student learning that may be impacted by AI
- Begin thinking about what kind of action might be required on your part



AI Capabilities

Please share other capabilities in this Zoom Chat

AI Capacity	Capsule Definition	Your Take
Summarizing text	AI can provide interpretive summaries of complicated text	  
Definitions	AI can provide quick definitions of terms and concepts	  
Prose composition	AI can generate text of various length	  
Learning plans	Instructors use AI to build and organize materials	  



Examine Your Course In Multiple Ways

As you examine your course, approach AI with a dual mindset:

- **Playing Defense:** Looking for features and uses of AI that may have negative impacts on student learning
- **Playing Offense:** Looking for opportunities where AI use can help students learn better, faster, or more efficiently



1. Goals and ELOs

For each goal and essential learning outcome (ELO) in your course, ask:

- Do students need to be able to demonstrate this ability autonomously?
- Do students need to be able to demonstrate all aspects of this ability autonomously?
- Are there moments when AI might provide assistance?



Bloom's plus Anderson-Kratwohl

Just as we must increase the student's engagement with the content through a semester or program,

So should we adjust their interaction with learning tools, including AI.



2. Activities and Assignments

Major and Minor Assignments

Formative and Summative Assignments

Information Acquisition and Information Processing

Massed Practice and Interleaved Practice

Use of AI to Learn Facts or to Enhance Concepts

On Exam Day, the Student Must Prove Acquisition of Knowledge



3. Learning Modes & Learning Moments

Explicit Guidelines

Use AI in Class Discussions

Education on Ethical Use

Regular Check-Ins

Integrate AI as a Learning Tool

Group Collaboration

Training Sessions

Assessment of the Process

Authentic Assignments

Leverage Institutional Resources



4. Pain Points and Pivotal Moments

Based on your experience in this course, what are the most crucial moments for students?

- Where do they struggle?
- What do students most dislike doing?
- What are concepts, topics, or practices that make everything that follows easier?



Looking Ahead (near)

Question based on your understanding of AI and your expertise with your course:

Looking forward through this semester and into summer and autumn, what kinds of AI-related skills will you be able to incorporate into your learning plan?



Takeaways

- Assess AI's impact by breaking the big questions into smaller questions and being specific about
 - What AI does (features and uses)
 - What happens in your course
- Defense is preventing AI from harming learning
- Offense is proactively engaging AI to enhance learning



Designing with Artificial Intelligence

Emily Gilbert
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The Drake Institute for Teaching and Learning



PICRAT

- Backward Design – outcomes should drive usage
- Several models for Technology Integration – PICRAT is one
 - Aim for purposeful integration of tech
 - “Why use the AI” versus “how to use it”
- PICRAT
 - Student use (passive, interactive, creative)
 - Teacher use (replaces, amplifies, transforms) practice
- AI and PICRAT
 - Student use could range from interactive to creative
 - Interactive at minimum (asking questions of AI)
 - Creative to construct knowledge (collaborative partner use + conversation with “more knowledgeable other”)
 - Teacher practice is transformed



Prompt Components (TRACI)

TRACI (link is external) is one kind of prompting framework that is useful for engineering prompts of Generative AI. The letters refer to various components of a prompt:

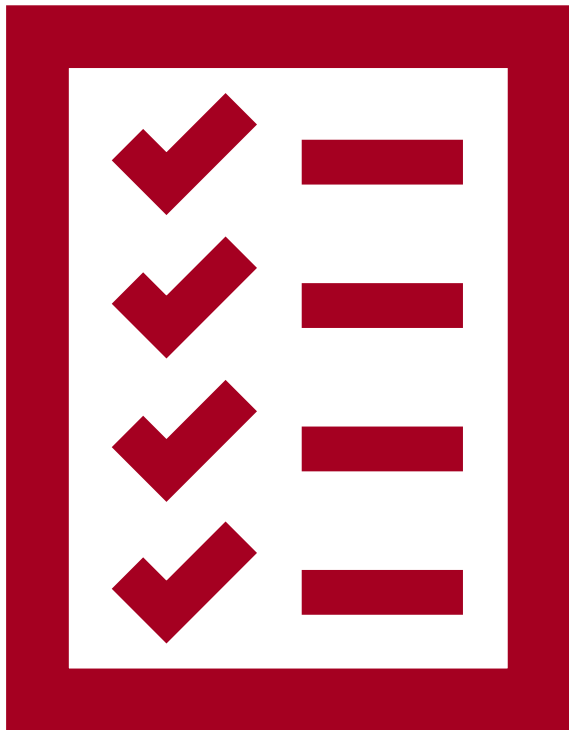
- **T-Task:** Task refers to the type of output the prompt should achieve. For example a rubric, learning goals, or a syllabus statement.
- **R-Role:** Role refers to the persona generative AI should take on when responding. For example an expert educator, a student advisor, and instructional designer
- **A-Audience:** Audience refers to the group to whom the response is written. For example introductory biology students, graduate level comparative study majors, doctor of pharmacy students.
- **C-Create:** Create refers to the format of the output, for example, 200 words, a three column table, or an acrostic poem.
- **I-Intent:** Intent communicates the purpose of the response for example to promote a growth mindset or clearly communicate expectations.



Prompt

You are an expert educator. Develop learning goals for an introductory college biology class. Make sure the learning goals are aligned with Finks Proximity Taxonomy.

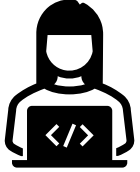




Implementing

Christy McLeod
College of Education and Human Ecology

Using AI in Assignments (Examples)



Prompt Engineering

Discuss the strengths, limits, and ethics of using AI by asking students to generate multiple responses from a single prompt and consider the different responses provided by the same prompt.



Evaluate

Give students an AI prompt, and then asking them to evaluate how true each part of the output is, require students to provide external corroboration of the correct answer, such as from other assigned readings or videos.



Analyze

Encourage students to use AI to simplify language when reading complex texts or learning difficult concepts. Students can also use AI to convert their research into conversational language for audiences outside of their discipline.

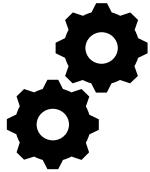


Using AI in Assignments (Examples)



Search

Have students use AI to explain wrong answers (Why is my answer wrong?) and look up correct answers to earn lost points on an assessment.



Generate

Ask students to create personas and then engage in interview-based conversations that simulate real-world scenarios.



Write

Create an assignment where students must state a claim, provide support, and ask AI to analyze their claim.

Yee, Kevin; Whittington, Kirby; Doggette, Erin; and Uttich, Laurie, "ChatGPT Assignments to Use in Your Classroom Today" (2023). UCF Created OER Works. 8. <https://stars.library.ucf.edu/oer/8>



(Non) AI Assignments

- **Metacognition:** identifying challenges and success of a project, setting incremental goals, self-assess strengths and weaknesses of their project
- **Authentic Application:** engage students in problem-based learning, real-world challenges with real stakeholders.
- **Theme/Course Connection:** ask students to connect readings to course experiences; use social annotation, and peer reviews for feedback.
- **Personal Reflections:** ask students to respond to prompts from their own experiences.

<https://teaching.cornell.edu/generative-artificial-intelligence/ai-assignment-design>



Components of the TILT Framework

Purpose of Assignment

- What knowledge or skills will students demonstrate?
- Why are these important?

Task

- What procedure will successful students follow?

Criteria

- What does a good assignment look like? How will it be assessed? (With examples)



[AI Teaching Strategies: Transparent Assignment Design | Teaching and Learning Resource Center \(osu.edu\)](#)



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The Fisher College of Business



Wrap Up

- What AI uses are you considering in your course(s)
 - Take 2 minutes and write down the next 3 things your going to do
- Resources and support
- Next sessions
 - March R&I
 - April Student support



Thank You

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Questions?

- We'd love your feedback!

- <https://go.osu.edu/ai-assignment-survey>



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