DESIGNING AI-RESISTANT ASSESSMENTS

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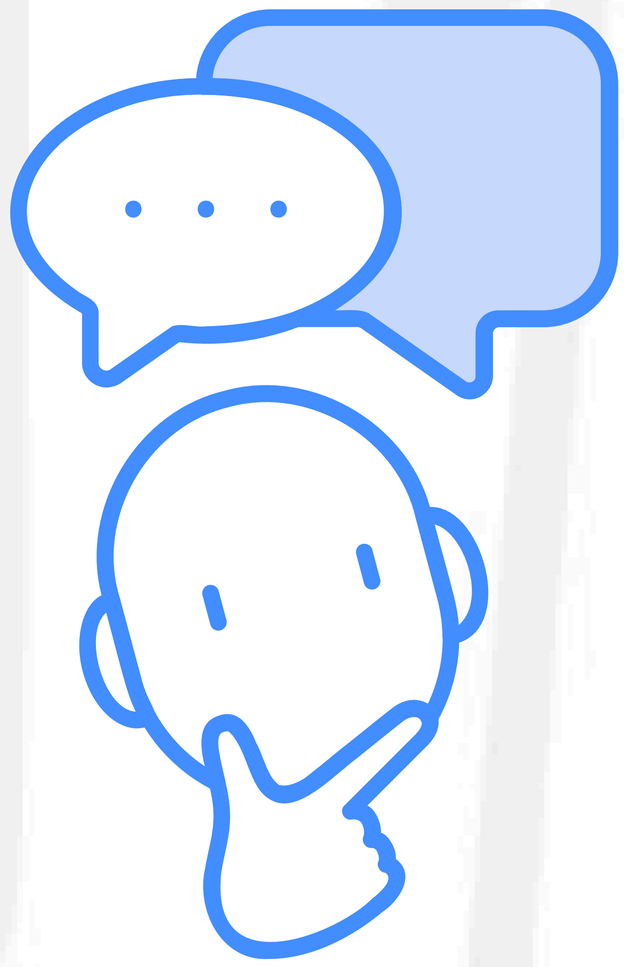
Introduction

This workbook provides practical strategies for creating assessments that students cannot easily answer using AI tools.
These strategies foster critical thinking, personal analysis, application of specific knowledge, and solving complex problems.

Objectifs :

- Encourage critical thinking and analysis.
- Incorporate personalized and contextual questions.
- Develop creative and collaborative skills.
- Use varied assessment methods.



Modules

01 **PERSONALIZED AND CONTEXTUAL QUESTIONS**

02 **CRITICAL THINKING AND COMPLEX PROBLEMS**

03 **CREATIVE TASKS**

04 **USING SPECIFIC SOURCES**

05 **COLLABORATIVE WORK AND ORAL ASSESSMENTS**

06 **QUESTIONS RELATED TO PROCESS OR METHODOLOGY**

MODULE 1:
PERSONALIZED AND CONTEXTUAL QUESTIONS

Strategy

Use local elements or class-specific examples to make assessments more personal and less predictable for AI.

One key strategy to make assessments more personal and less predictable for AI is to integrate local elements or class-specific examples. This can include using current topics relevant to students, case studies from their immediate environment, or cultural references that resonate with their experiences. By incorporating examples that are meaningful and familiar, assessments become more authentic and engaging. This approach enriches the evaluation process while bypassing AI's predictive models by adding unique, human-centered elements that algorithms cannot easily capture.

Activity

Example:
Describe how this year's group project X could be improved using your own ideas.

Practical exercise

1. Identify a recent class topic or project.

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2. Draft a personalized question related to this context.

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MODULE 2:
CRITICAL THINKING AND COMPLEX PROBLEMS

Strategy

Ask questions that require multiple steps of thinking or reasoning, including ethical evaluations or argumentative analyses.

The strategy of asking questions that require multiple steps of thinking or reasoning aims to foster deeper critical thinking. Instead of seeking simple answers, these questions compel students to go through various stages of analysis, synthesis, and evaluation. For example, asking students to discuss the ethical implications of a given decision or analyze a complex argument to assess its validity encourages a more comprehensive understanding of the topic. This approach not only develops critical reasoning skills but also prepares students for situations where they must justify their choices and articulate their views thoughtfully and convincingly.

Artificial intelligence, however, cannot perform this optimally as it relies on predictive algorithms that do not account for subjective nuances, unique contexts, or the moral judgments required to address ethical questions or argumentative analyses. AI lacks the flexibility and contextual understanding necessary to navigate complex debates or provide nuanced justifications.

Activity

Example :
Analyze the ethical implications of AI in society, considering opposing viewpoints.

Practical exercise

1. Create a complex question requiring multiple reasoning steps.

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Provide a response model to guide your students.

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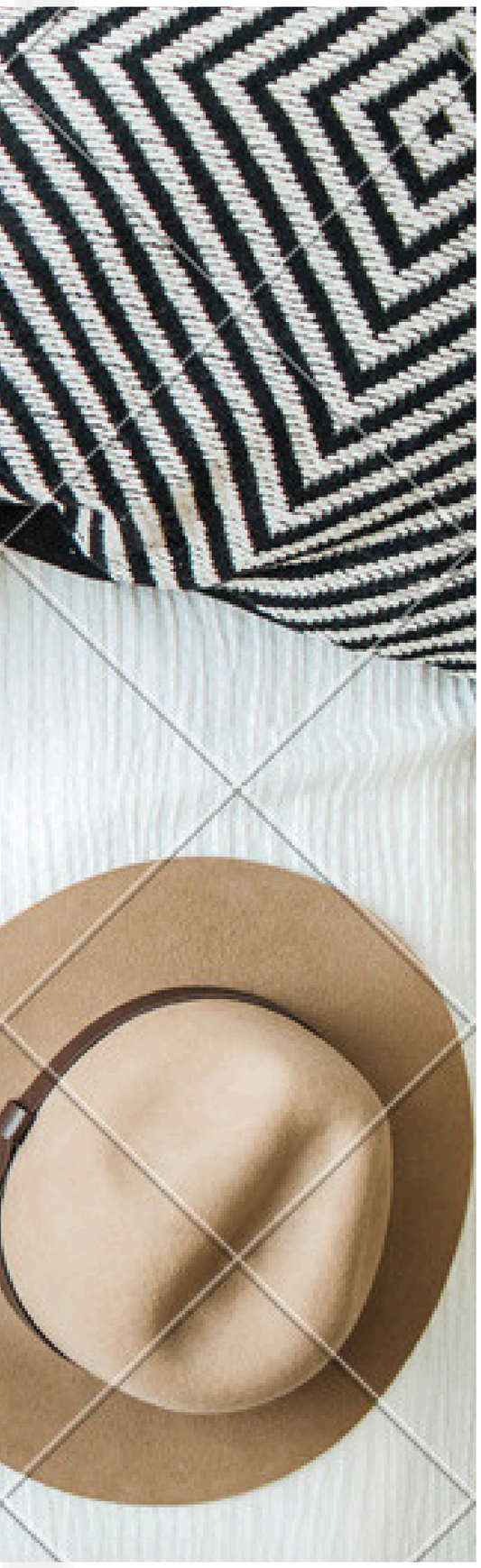
MODULE 3:
CREATIVE TASKS

Strategy



Encourage artistic creation, storytelling, or original design.

The strategy of encouraging artistic creation, storytelling, or original design aims to stimulate innovation and creative thinking among students. These activities require not only technical skills but also the ability to personalize and express ideas uniquely. For example, asking students to create a piece of artwork, write a story, or design a project that reflects their own perspective or personal experience pushes them to think outside established frameworks and explore new solutions. This fosters problem-solving skills, communication, and personal expression, while allowing students to emotionally connect with the content and demonstrate their understanding in ways that go beyond predictable answers.

Artificial intelligence, on the other hand, is limited in its ability to generate original artistic creations or personalize works meaningfully, as it primarily relies on pre-existing data and predictive models that do not account for human creativity or personal expression.

Activity

Example :

Create a poster for a school event that reflects your cultural background or interests, and explain your design choices in a few sentences.

Practical exercise

1. Define a creative project relevant to your subject area.

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2. Choose a presentation method for your students to showcase their work (e.g., gallery walk, small group presentations, interactive demonstrations).

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MODULE 4:
USING SPECIFIC SOURCES

Strategy

Ask students to answer questions using provided documents or specific resources.

The strategy of asking students to answer questions based on provided classroom documents or specific resources aims to strengthen their ability to synthesize and apply information. By using relevant documents, such as articles, case studies, book excerpts, or videos, students are encouraged to analyze content, ask questions, and make connections between different elements. This approach helps develop critical reading skills, data interpretation, and reflection on complex information. It also pushes students to refine their ability to justify their answers using concrete evidence, enhancing their understanding and engagement with the studied topic.

For artificial intelligence, this presents a challenge because it cannot easily grasp contextual nuances or extract complex information from varied documents. AI lacks the cognitive flexibility needed to integrate personal and contextual elements specific to each student, making it less suited to answer questions requiring nuanced interpretation.

Activity

Example :
Using Chapter 3 of Textbook X and Article Y, discuss the differences between the perspectives of the two authors.

Practical exercise

1. Identify two relevant resources you could use.

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2. Write a question that asks your students to compare or analyze the resources by creating a graphic summary (mind map) of the key points.

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MODULE 5: COLLABORATIVE WORK AND ORAL ASSESSMENTS

Strategy

Integrate group activities or oral presentations to assess interpersonal dynamics and communication Skills.

The strategy of integrating group activities or oral presentations allows for the assessment of not only students' academic understanding but also their ability to collaborate effectively and communicate their ideas clearly. When working in groups, students face challenges such as negotiation, collective decision-making, and problem-solving in real-time, which better mirrors the real world where these skills are crucial. Oral presentations require students to organize their thoughts, argue clearly, and respond to peer questions, which is essential for their academic and personal development.

For artificial intelligence, this type of assessment is challenging because it requires a deep understanding of human interactions and social skills that are not easily translated into predictive algorithms. AI struggles to grasp complex group dynamics, such as spontaneous cooperation, emotional considerations, and flexible strategy adjustments, which limits its ability to effectively assess these skills in interpersonal contexts.

Activity

Example :
Design a group invention to reduce plastic waste in your community and present it to the class.

Practical exercise

1. Organize your students into groups.

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2. Assign each student a collaborative task with a final presentation. (e.g., content manager, logistics manager, discussion facilitator, secretary, evaluator, presenter, creator, documenter, group dynamic leader, thought leader)

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MODULE 6:
QUESTIONS RELATED TO PROCESS OR METHODOLOGY

Strategy

Ask students to detail their reasoning or methodology to arrive at a solution.

The strategy of asking students to detail their reasoning or methodology helps assess their ability to think critically and structure their thinking. By requiring a clear explanation of the steps they took to solve a problem or arrive at a conclusion, this approach promotes active and conscious learning of their thought process. It not only verifies their understanding of the subject but also identifies the methods they use and encourages them to justify their choices.

For artificial intelligence, this task is limited because it cannot yet effectively integrate subjective and contextual aspects that are essential for a detailed explanation of a methodology, making this type of assessment challenging for AI.

Activity

Example :
Explain in detail how you arrived at the solution to this math problem.

Practical exercise

1. Identify an activity where your students must explain each step of their reasoning to a partner.

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2. Create a quiz asking your students to identify errors in given reasoning. Example: Examine the following reasoning and identify the errors:

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ANALYZE

DEVELOP CRITICAL THINKING

The strategies introduce complex tasks that stimulate critical thinking and in-depth analysis, preparing students to tackle academic and real-world challenges.

PROMOTE AUTHENTIC ASSESSMENTS.

The proposed strategies create personalized and contextual assessments that reflect students' understanding and application in meaningful contexts.

BYPASSING THE LIMITS OF AI

By integrating creativity and complex reasoning, these approaches make assessments resistant to automated tools, ensuring a true measure of human skills.

DEVELOP TRANSFERABLE SKILLS.

The methods promote problem-solving, collaboration, and communication skills, which are essential for future success in demanding environments.

THANK YOU

FOR JOINING US

Thank you for sharing your email with me! I'm excited to share valuable resources with you, like this workbook on AI-resistant assessments. I hope it will help you design authentic and engaging assessments for your students.

Also, if you haven't joined our InTA (Innovating Teachers Academy) community on Facebook yet, now is the perfect time! It's a space where teachers and trainers share ideas, collaborate, and exchange innovative practices.

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I look forward to continuing to support you in your educational projects!

See you soon,

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