

# Navigating Artificial Intelligence (AI) in the College Classroom: Fostering Critical Conversations and Comparisons

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# Learning Objectives:

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- Compare and contrast AI-generated content with professional educational content.
- Formulate ideas for assignments and discussion questions to guide college students in AI usage.

# Description

- As artificial intelligence (AI) becomes increasingly integrated into our educational landscape, it is imperative for educators to navigate its role in the college classroom effectively.
- This session delves into practical strategies for fostering meaningful discussions about the reliability of information and the ethical implications of AI-generated text within academic assignments.
- Through the exploration of two distinct assignments, attendees will gain insights into facilitating critical comparisons between professional resources and AI-generated information.

# Why it matters?

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Empower students to engage with AI tools judiciously and critically.



Shape a future where AI enhances learning without compromising academic rigor or integrity.

# Background and Context

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- Elementary teacher preparation program.
- Two undergraduate classes:
  - Elementary Science Methods class
  - Education Assessment class
- Began each lesson series with assessing knowledge and previous use of AI.



# Prior AI Use by my Undergraduates

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- To generate discussion board responses
- To write non-fiction text for another education class
- To populate a list of words with specific qualities (short e words, compound words)
- To write elementary math word problems



# First Assignment – Lesson Planning

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Compare professional resources to AI-generated resources for 5 E model science lesson plans.

# Lesson Planning Comparison

## Science Methods Class

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1. Learned and analyzed a 5 E lesson plan format.



2. Found a 5 E lesson from a reputable source.



3. Used AI to generate a 5 E lesson plan. (EduAlde)



4. Create a chart, comparing the two sources, and curated ideas for their own lesson plan

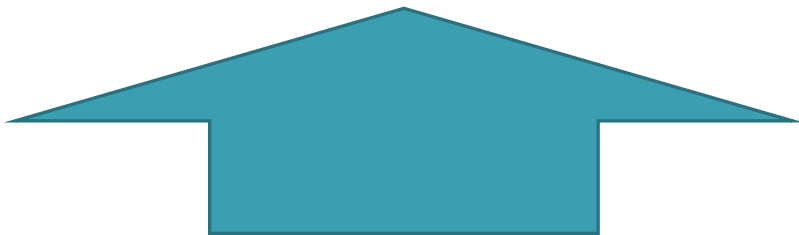


# Student Observations of AI lesson planning

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## Pros:

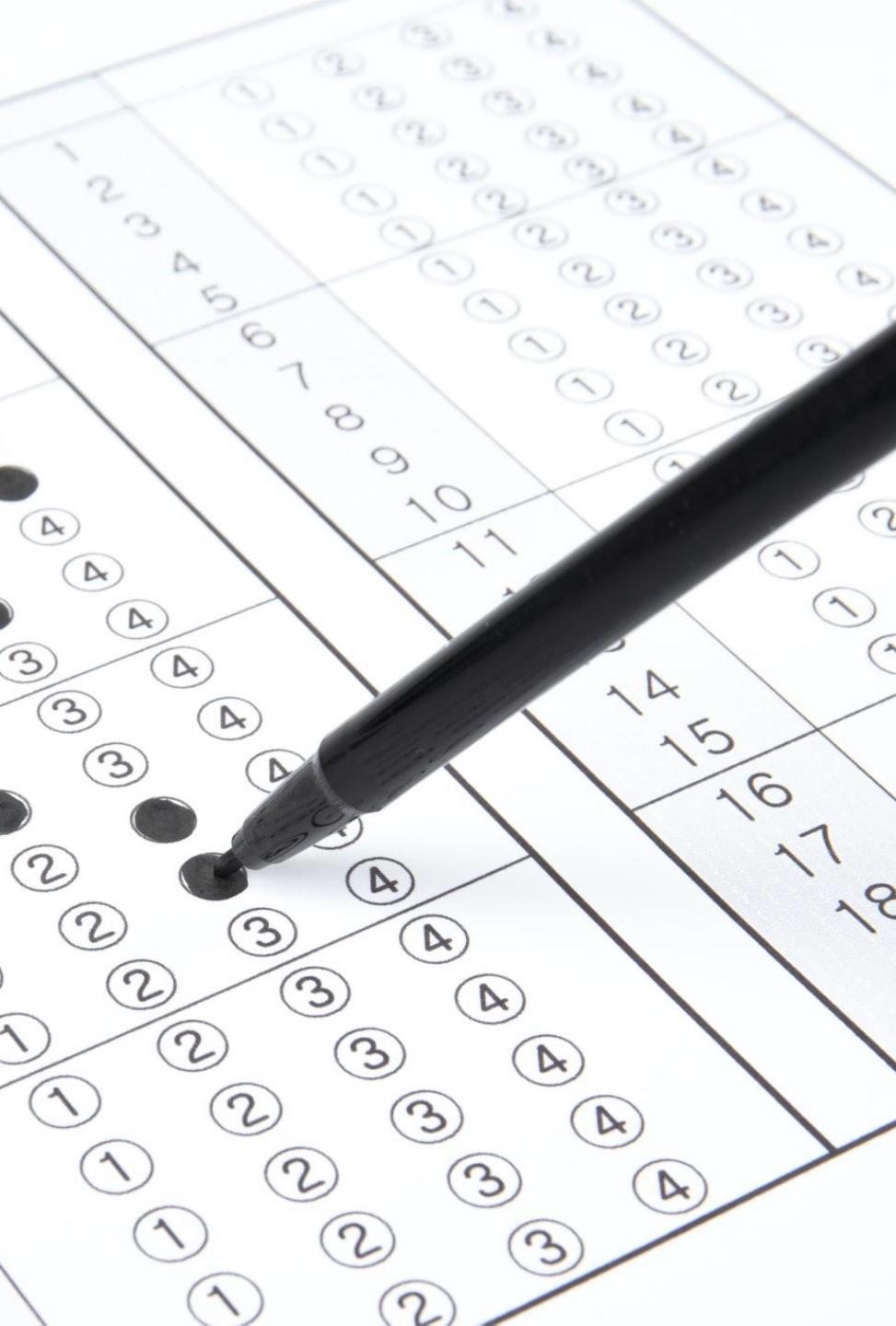
- How quickly ideas were generated
- 5 E Lesson assistance was available
- Some thought-provoking ideas generated



## Cons:

- Not all ideas were substantial
- Too heavy on lower-level thinking objectives
- Often redundant





# Second Assignment—

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Use assessment guidelines to write multiple-choice test items, then compare to AI-generated multiple-choice test items.

# Assessment Item Comparison

## Educational Assessment Class

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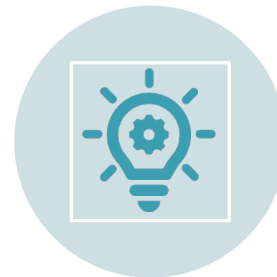
1. Learned guiding principles of writing multiple-choice test items.



2. Created multiple-choice test items based on non-fiction text.



3. Used the same text in AI to generate multiple-choice test items.



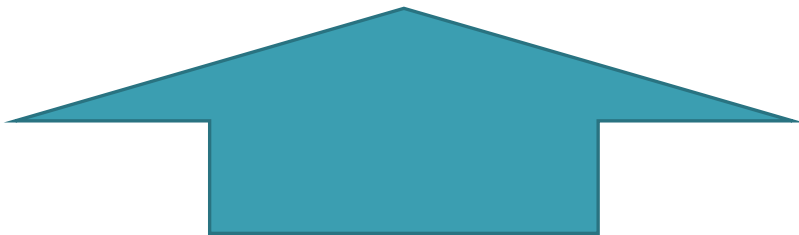
4. Compared AI-generated items to the guiding principles.

# Student Observations of AI test item creation

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## Pros:

- How quickly ideas were generated
- Did not know it existed.
- “Mind blown” at how AI uses text to generate questions



## Cons:

- Not all items met our guiding principles for test item creation.
- Some concepts repeated.
- Not all content was covered.



# Discussion Questions

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What criteria can we use to evaluate the reliability of AI-generated content?

How do we address the ethical concerns surrounding AI usage in academic assignments?

In what ways can students leverage AI tools responsibly in their coursework?

# Strategies for Implementation

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- Provide clear guidelines for evaluating and using AI-generated content.
- Incorporate peer discussion and reflection into assignments.
- Encourage students to critically analyze and question the sources of AI-generated content.
- Encourage thoughtful AI prompts to yield more desirable results.
- AI can be a supplement, not a replacement, to good teaching and learning activities.



# Conclusion

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- Educators can empower students to harness the potential of AI while cultivating a deeper understanding of its limitations and ethical considerations.
- Together, we can shape a future where AI enhances learning without compromising academic rigor or integrity.