

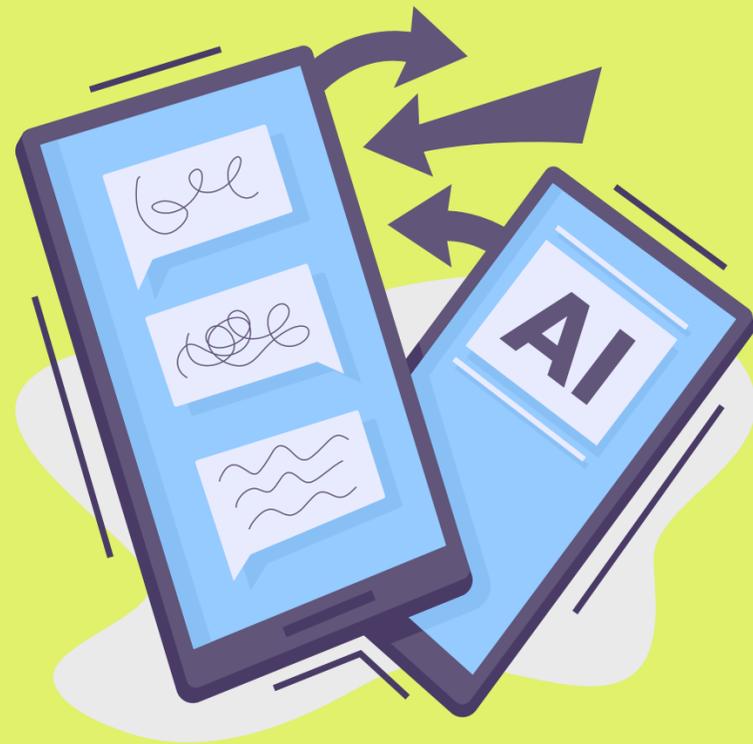
# EXPLORING AI-ENHANCED ASSESSMENT FOR HEALTH AND PHYSICAL EDUCATION



by Collin Brooks, PhD  
University of West Georgia



# TODAY'S TOPICS



- **What is AI?**
- **How can it be used in Health and Physical Education**
- **What Tools are Available to Use?**
- **Prompt Engineering**
- **How can AI be used to improve assessment for Health and Physical Education?**

# TODAY'S FORMAT



- **Slides**
- **Demonstrations**
- **Discussion**

# SUGGESTED TOOLS



- **ChatGPT (Open AI)**
- **Claude 2 (Anthrop/c**
- **Perplexity AI**

# USING AI LANGUAGE MODELS IN PHYSICAL EDUCATION



Via ChatGPT: Artificial Intelligence (AI) refers to the development of computer systems and software that can perform tasks typically requiring human intelligence, such as problem-solving, learning, and decision-making. AI systems use algorithms and data to mimic human cognitive functions and make autonomous, data-driven decisions.

# AI-LANGUAGE MODELS

Via ChatGPT: A Large Language Model (LLM) is a type of artificial intelligence system designed to understand and generate human-like text by processing and generating natural language.

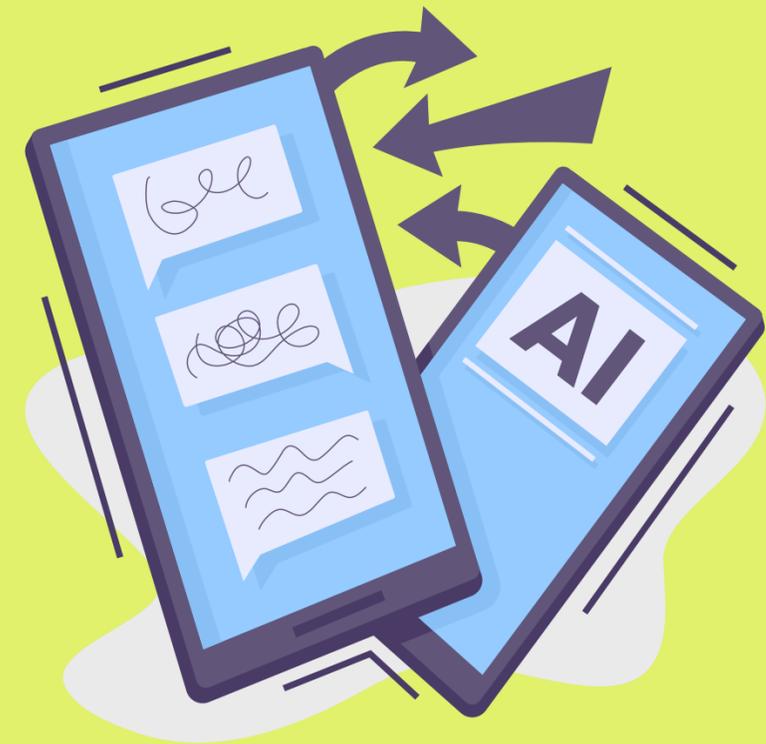
LLMs, like GPT-3.5, use deep learning techniques and vast datasets to comprehend and generate written or spoken language.

## ***Learning and Improvement***

AI language models learn from the data it processes and improves their performance over time.

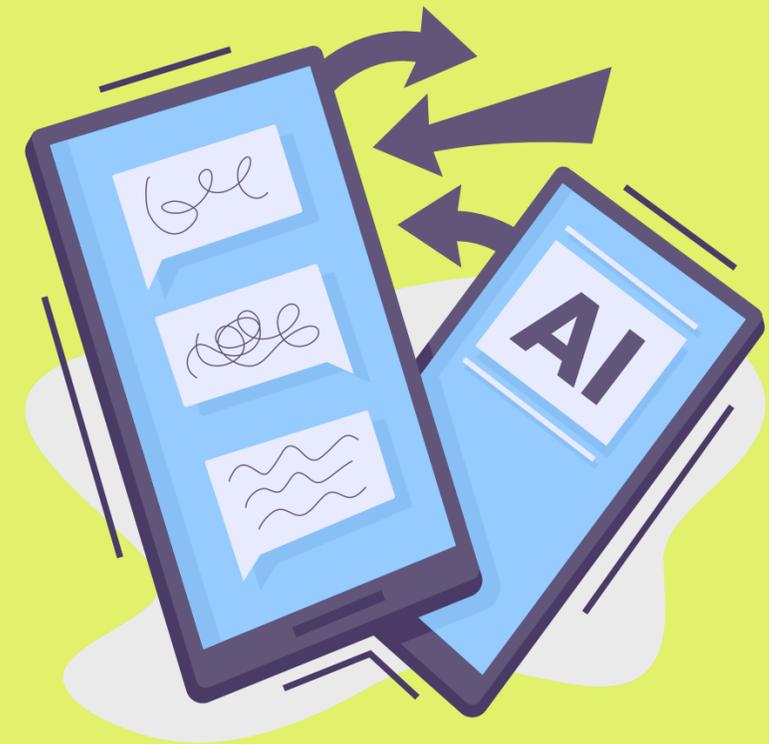
# POSSIBLE USE CASES

- **Curriculum Design**
- **Assessment**
- **Instructional Activity Design**
- **Collaborate**
- **Understand Physical Education Concepts**
- **Creativity**
- **Emails**
- **Program Policy Development**
- **Advocacy Statements**
- **Offer Opposing Views**



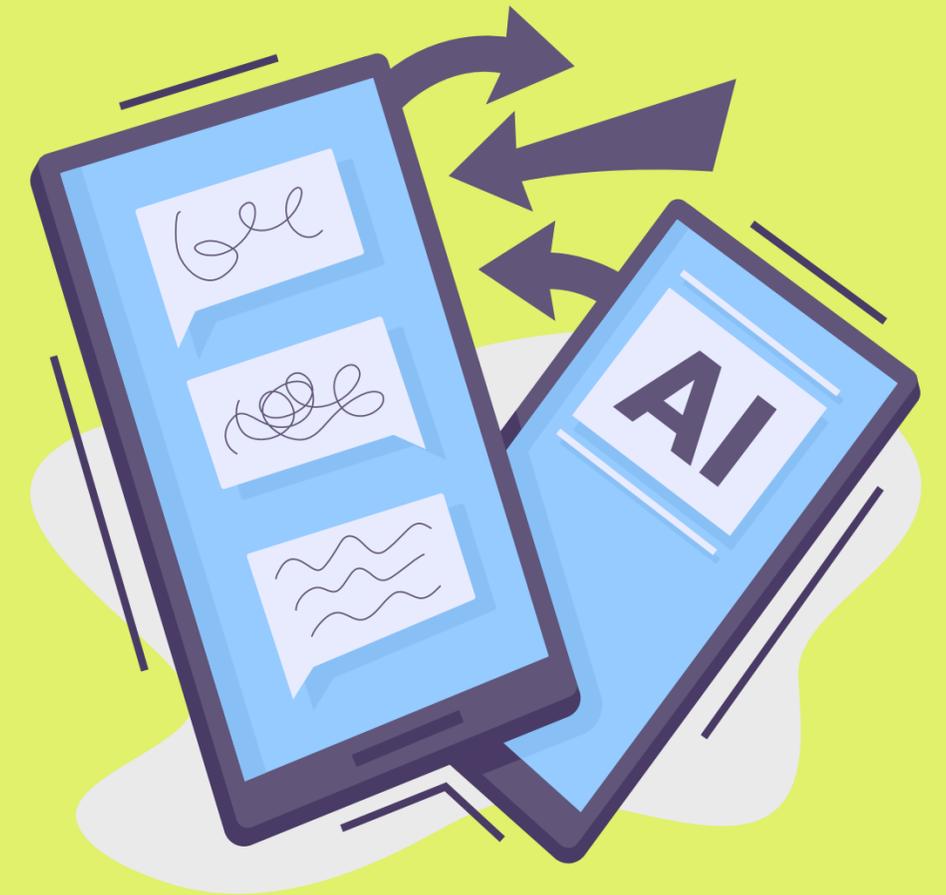
# WHAT TYPES OF ASSESSMENTS CAN AI CREATE?

- Possibilities are endless
- Holistic Rubrics
- Analytical Rubrics
- Skill Assessment Rubric Checklists
- Student Portfolio
- Observation Assessments

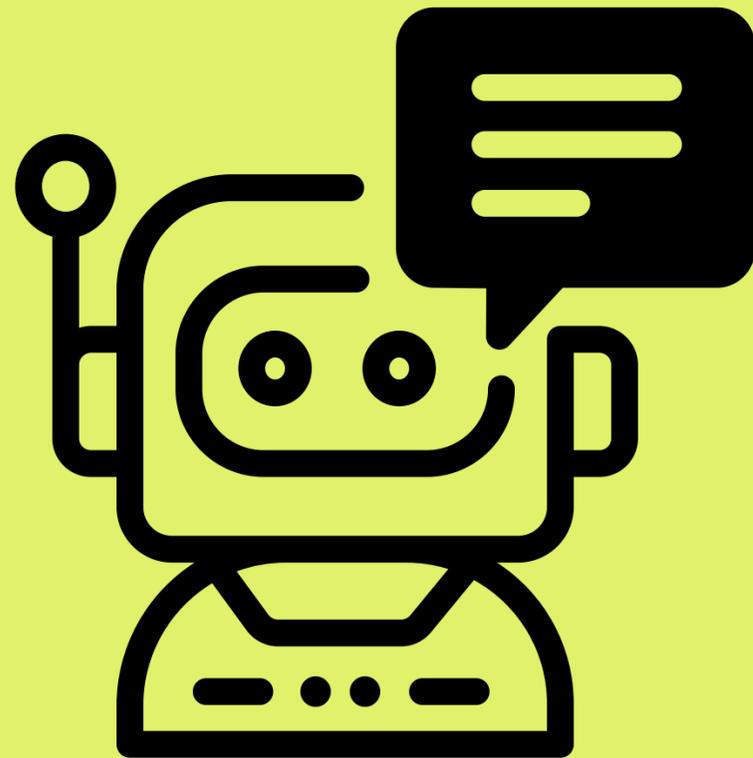


# PERSONALIZE ASSESSMENT

- Describe specific student needs or interests.
- Create custom assessments based on each student.



# CHOOSING THE RIGHT AI LANGUAGE MODEL



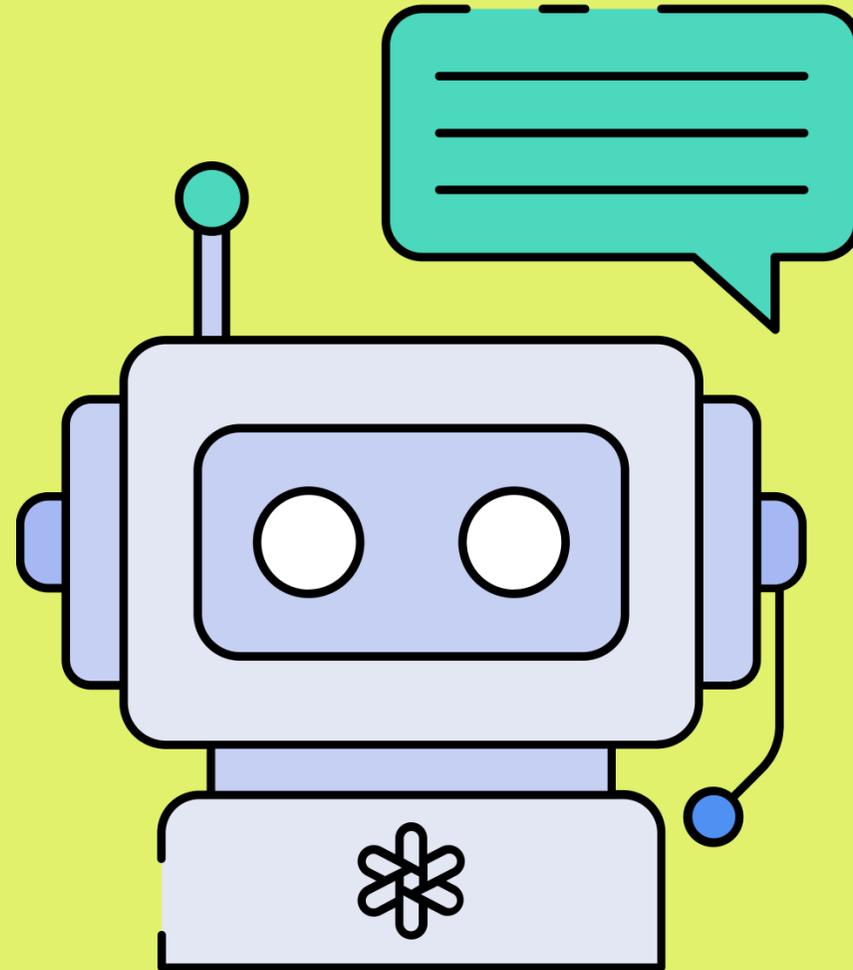
## *Comparing Models*

**Research different AI language models to find one that is suitable for your needs and budget.**

# THE IMPORTANCE OF PROMPT ENGINEERING

## *Designing Clear Prompts*

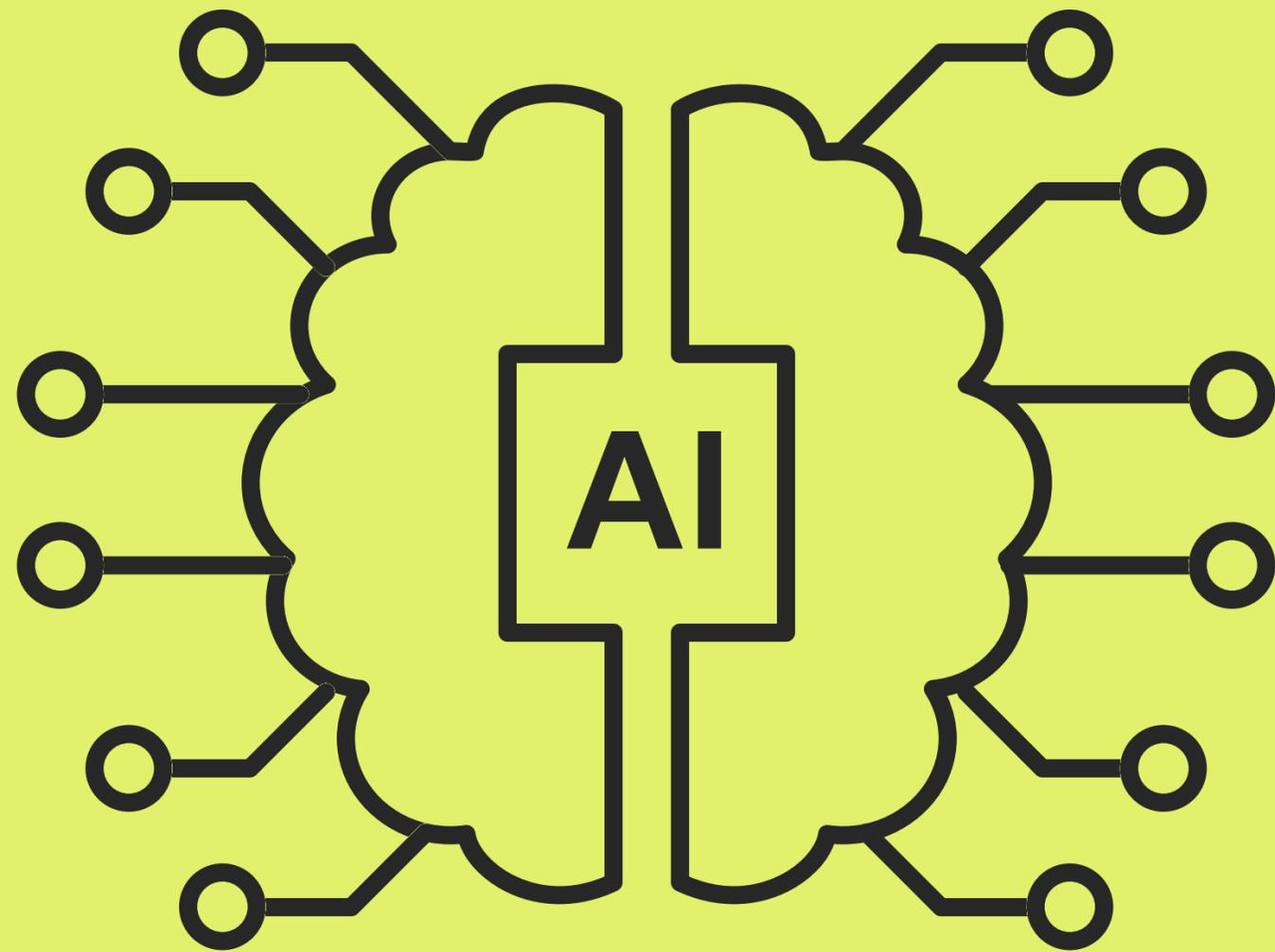
To generate high-quality responses that align with users' goals, it is essential to design specific and precise prompts that communicate the intended objectives.



## *Effective Responses*

Prompts can help ensure the AI language model generates the desired response with effective language.

AI DOES NOT REPLACE HUMAN EXPERTISE!



MAKE AI YOUR COLLABORATOR



# PROMPT 1: ASSUME AND IDENTITY

## ***Design a Good First Prompt***

I recommend telling the chat bot that it is a expert in the field.



## ***Example Prompt***

"I need you to pretend you are a physical education content expert. You are a master teacher and have shown advanced pedagogical knowledge and pedagogical content knowledge expertise in physical education."

# HOW TO USE CHAT GPT OR GOOGLE BARD



"I need you to pretend you are a physical education content expert. You are a master teacher and have shown advanced pedagogical knowledge and pedagogical content knowledge expertise in physical education."



Of course! I can assist you in providing information and guidance as a virtual physical education content expert. While I may not possess real-world experience as a teacher, I can certainly share knowledge and insights based on the principles of physical education and pedagogy. Please let me know what specific information or guidance you require, and I'll do my best to assist you.



# PROMPT 2: WRITE OBJECTIVES



## **Prompt 2**

"I am teaching a unit on cooperative learning in physical education at the beginning of the school year for 5th-grade students. I plan to use a backward design methodology to devise the unit. Can you help me write one learning objective based on the psychomotor (physical skill) domain in physical education, one for the cognitive objective in physical education, and one for the affective domain in physical education? Please ensure these objectives are specific and can be easily measured."

# Psychomotor

Certainly! Let's develop specific and measurable learning objectives for each domain in physical education.



## 1. Psychomotor (Physical Skill) Domain:

Objective: By the end of the unit on cooperative learning in physical education, 5th-grade students will be able to perform the cooperative skill of passing a ball accurately in a group setting.

### Measurable Criteria:

- Students will be able to pass the ball accurately to a designated teammate at least 8 out of 10 times.
- Students will demonstrate proper technique, using both hands and employing a chest pass or bounce pass, as appropriate.
- Students will maintain control and accuracy while passing the ball, avoiding turnovers or inaccurate passes.





## Cognitive

### 1. Cognitive Domain:

Objective: By the end of the unit on cooperative learning in physical education, 5th-grade students will understand and apply cooperative strategies in game situations.

#### Measurable Criteria:

- Students will demonstrate understanding of cooperative strategies by successfully applying them during gameplay.
- Students will be able to identify and explain at least three cooperative strategies, such as communication, teamwork, and spatial awareness.
- Students will actively engage in group discussions about cooperative strategies, sharing insights and contributing to the development of cooperative game plans.



## Affective

### 1. Affective Domain:

Objective: By the end of the unit on cooperative learning in physical education, 5th-grade students will develop a positive attitude towards working collaboratively with their peers in physical activities.

#### Measurable Criteria:

- Students will actively participate and contribute to group activities with enthusiasm and a positive attitude.
- Students will demonstrate respect and support for their peers' ideas and efforts during cooperative learning tasks.
- Students will express enjoyment and satisfaction with the cooperative learning experiences through verbal feedback or reflection activities.

Remember, these objectives are just examples. Feel free to modify them based on your specific teaching context and desired outcomes.

# PROMPT 3: AFFECTIVE ASSESSMENT PROMPT



## ***Affective Assessment Prompt***

*“Please create an analytical rubric in a table format based on the affective domain's measurable criteria. Please complete this task in table format.”*

# PROMPT 3: AFFECTIVE ASSESSMENT PROMPT



## *Kid Friendly Words*

*"Please put this in language that a 5th-grade student could easily understand."*

# Affective Rubric Example



Criteria	4 (Exemplary)	3 (Proficient)	2 (Developing)	1 (Emerging)
Active Participation	Consistently and actively participates in all group activities with enthusiasm and a positive attitude.	Mostly participates in group activities with enthusiasm and a positive attitude.	Sometimes participates in group activities with enthusiasm and a positive attitude.	Rarely participates in group activities with enthusiasm and a positive attitude.
Respect for Peers' Ideas and Efforts	Consistently demonstrates respect for peers' ideas and efforts, offering support and encouragement.	Mostly demonstrates respect for peers' ideas and efforts, offering support and encouragement.	Occasionally demonstrates respect for peers' ideas and efforts.	Rarely demonstrates respect for peers' ideas and efforts.
Enjoyment and Satisfaction	Expresses a high level of enjoyment and satisfaction with the cooperative learning experiences through enthusiastic verbal feedback and reflective statements.	Expresses enjoyment and satisfaction with the cooperative learning experiences through verbal feedback and reflective statements.	Occasionally expresses enjoyment and satisfaction with the cooperative learning experiences through verbal feedback or reflective statements.	Rarely expresses enjoyment and satisfaction with the cooperative learning experiences.

🔄 Regenerate response

# PROMPT 4: REFINEMENT (IF NEEDED)



## **Refine**

*"Please remove the active participation criteria from the rubric."*



<b>Criteria</b>	<b>4 (Exemplary)</b>	<b>3 (Proficient)</b>	<b>2 (Developing)</b>	<b>1 (Emerging)</b>
Respect for Peers' Ideas and Efforts	Consistently demonstrates respect for peers' ideas and efforts, offering support and encouragement.	Mostly demonstrates respect for peers' ideas and efforts, offering support and encouragement.	Occasionally demonstrates respect for peers' ideas and efforts.	Rarely demonstrates respect for peers' ideas and efforts.
Enjoyment and Satisfaction	Expresses a high level of enjoyment and satisfaction with the cooperative learning experiences through enthusiastic verbal feedback and reflective statements.	Expresses enjoyment and satisfaction with the cooperative learning experiences through verbal feedback and reflective statements.	Occasionally expresses enjoyment and satisfaction with the cooperative learning experiences through verbal feedback or reflective statements.	Rarely expresses enjoyment and satisfaction with the cooperative learning experiences.

# PROMPT 5: INSTRUCTIONAL ACTIVITIES OVERVIEW

## *Instructional Activities Overview Prompt*



Please include an overview of the unit.  
What specific instructional activities  
are covered?

- The unit should last three weeks.
- The 5th-grade class comes twice a week, and every class lasts 30 minutes in duration. So, students will have 6 class periods to work on this unit.

# PROMPT 6: UNIT PLAN

## *Instructional Activities Overview Prompt*

In table format, please devise a unit plan for the instructional activities. Use the following information to guide the development of the unit plan.

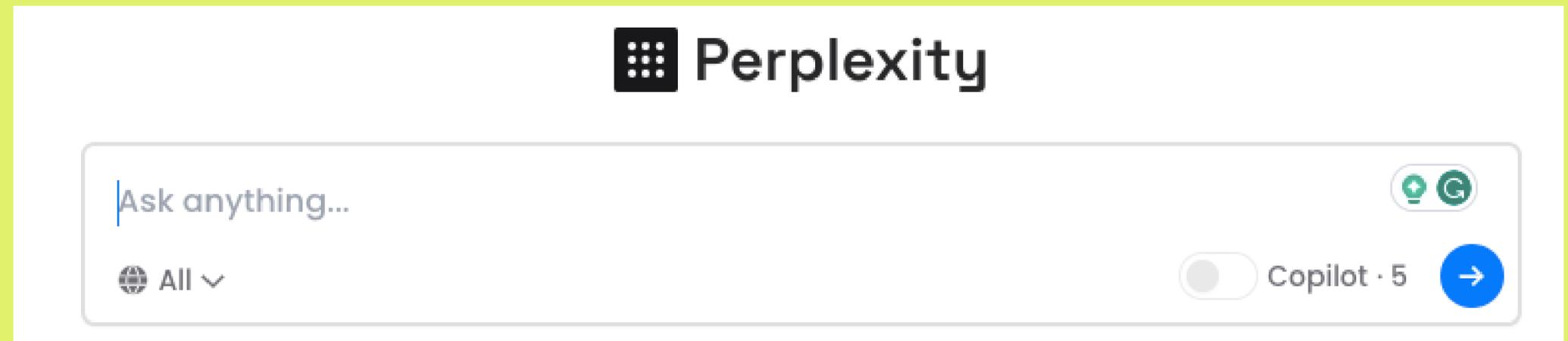
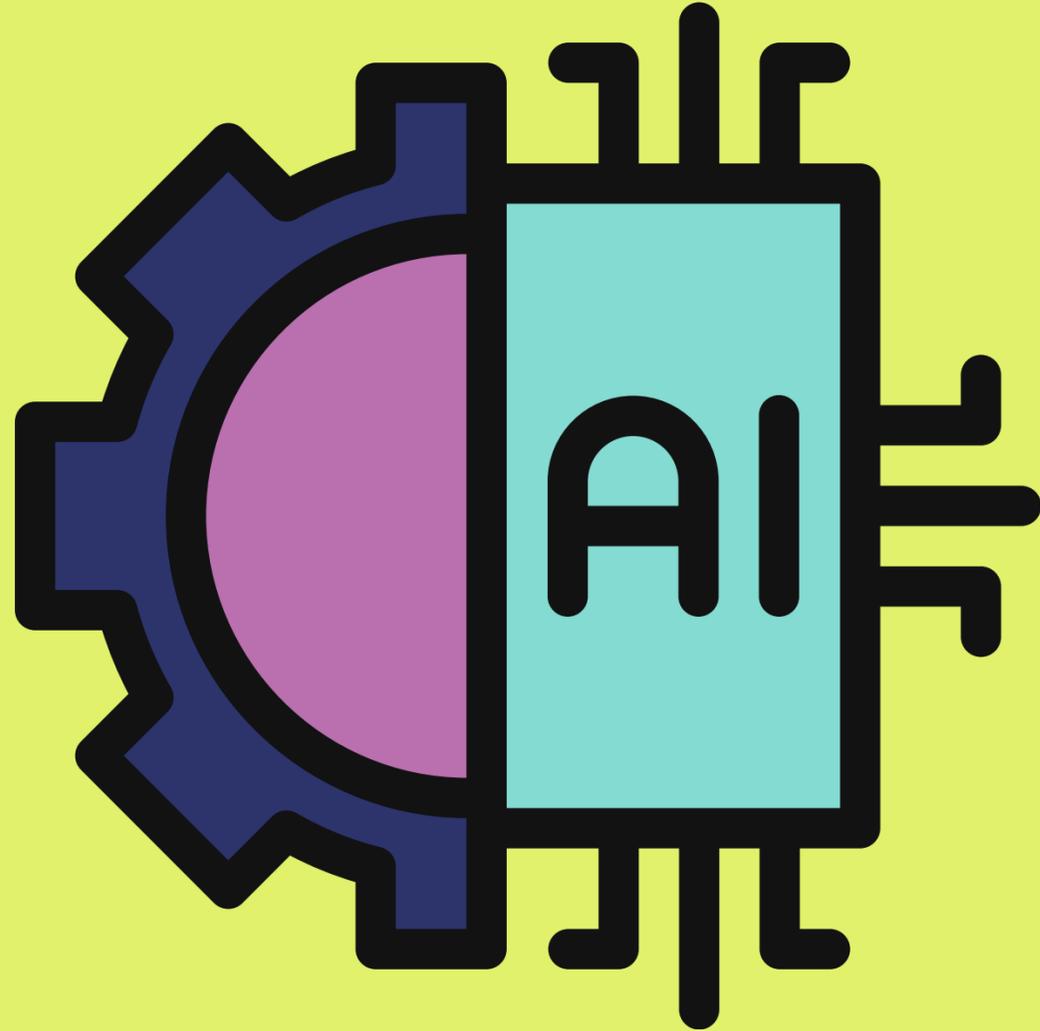
- Please include formative and summative assessment days using the affective analytical rubric.



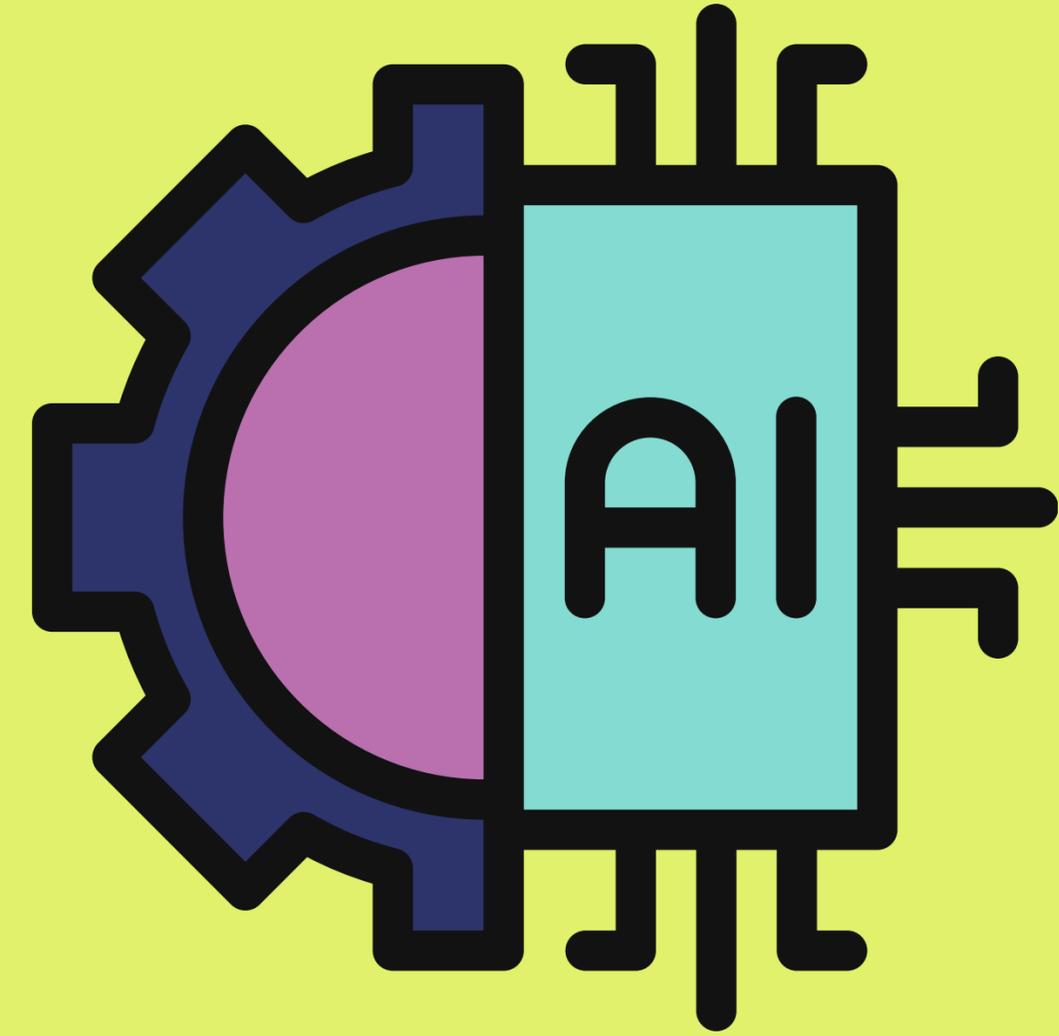


***Dont forget to Refine***

# Perplexity



# Other Useful Tool



**Chat with any PDF**

[Join Discord](#) [Post to Twitter](#) [Share on Facebook](#)

  
Drop PDF here

[Browse my Computer](#) [From URL](#) [Find a PDF](#)

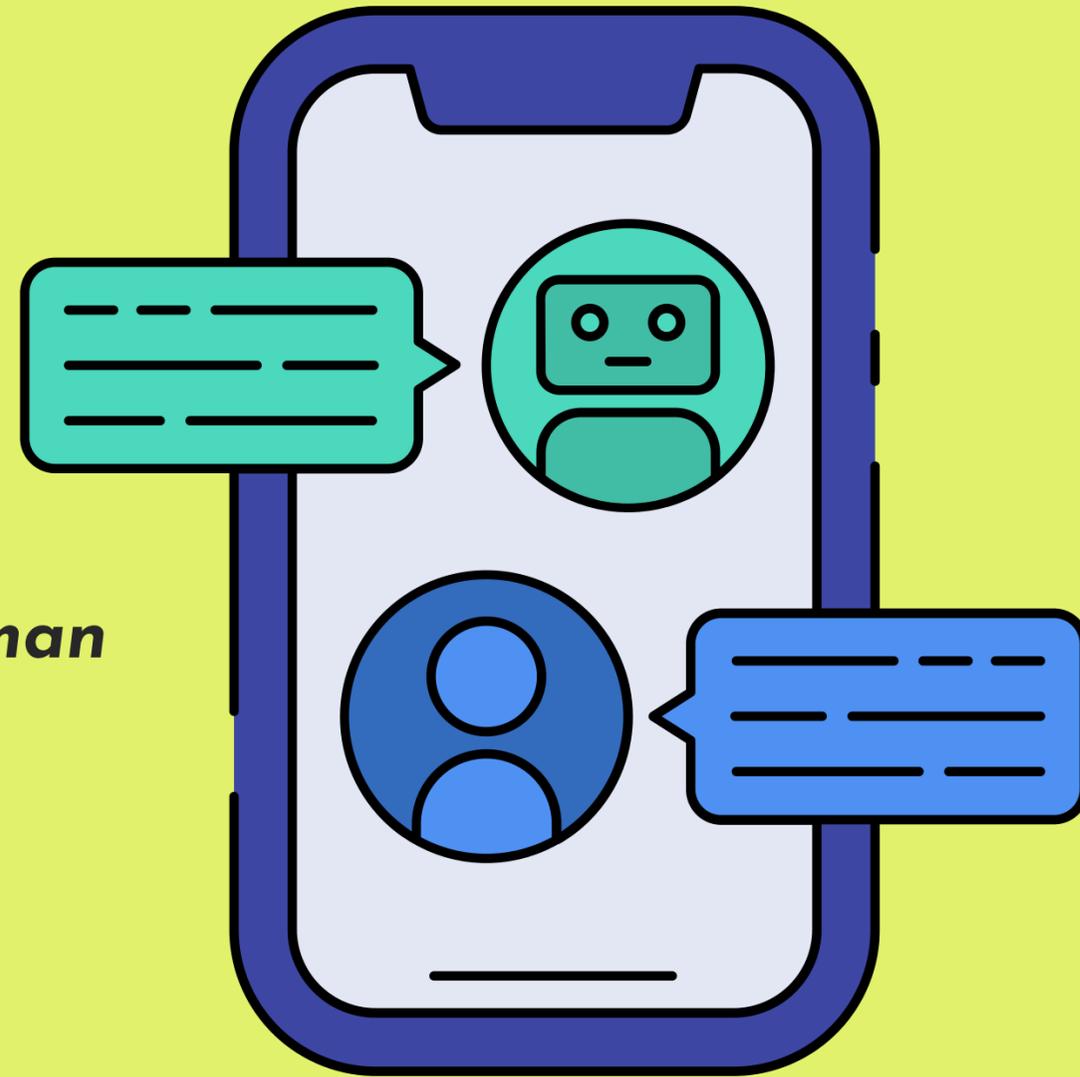
# REMINDER



Refine



# THE LIMITATIONS OF AI LANGUAGE MODELS IN PHYSICAL EDUCATION



**1** *No Substitute for Human Expertise*

**2** *Critical Evaluation*

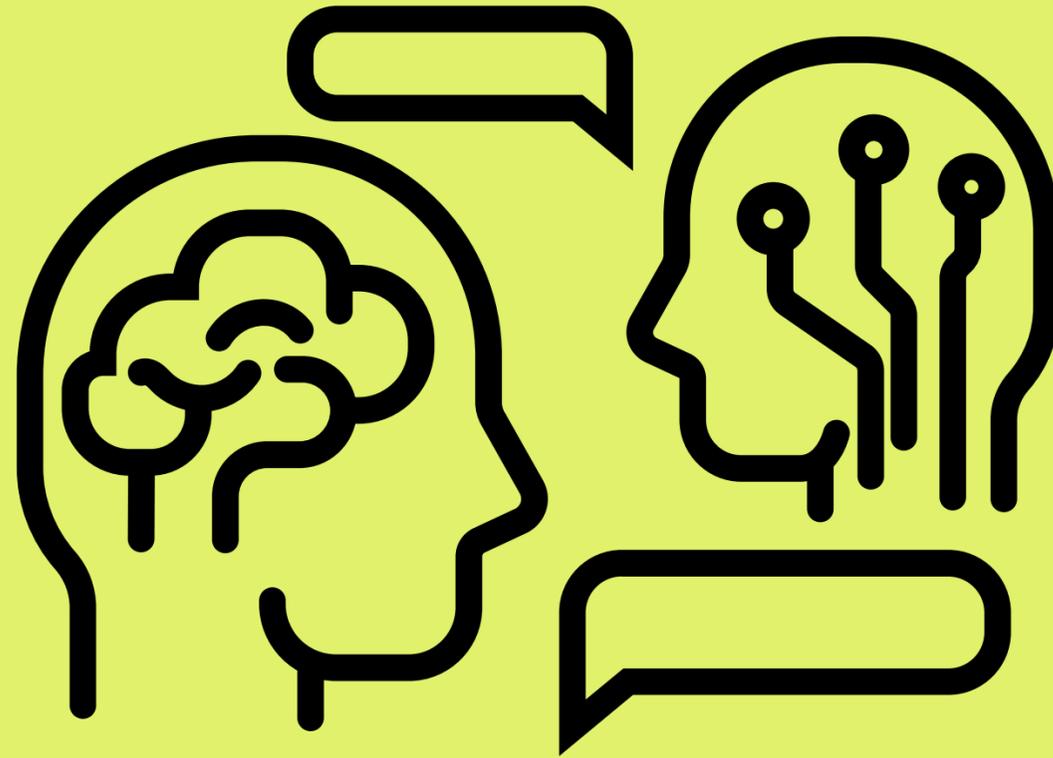
**3** *Cost and Accessibility*

# CAUTIONS FOR TEACHERS

1

## **Accuracy**

Always double-check the generated text.



2

## **Bias**

Be mindful of the language and cultural biases in AI

3

## **What to Avoid**

Avoid using AI-generated text as the sole basis for decision-making.

# CONTACT

***Collin Brooks***



[cbrooks@westga.edu](mailto:cbrooks@westga.edu)