Solving Unethical Situation Using AI in Physics

AI Interaction Template for Students

1. Research Phase – Presentation a real-life situation to the class: "In a physics class, students are learning about gravity and the laws of motion. One student, Alex, uses ChatGPT to complete a lab report on an experiment that involves measuring the acceleration due to gravity. Alex inputs the experimental data into ChatGPT and uses the AI-generated analysis without fully understanding the calculations and reasoning behind it."

Type your thoughts here:
Discussion the situation as a class, focusing on the following points:
- *What are the potential benefits of Alex using ChatGPT in this situation?*
- *What are the potential drawbacks or ethical concerns?*
- *How might Alex's learning be affected by relying on AI to complete the lab report?*

2. Deep Dive Phase - Group Discussion: small groups provided with a different aspect of the situation to discuss:

Write your discussed aspects here:
Discission questions:
- *Academic Integrity: Is Alex's use of ChatGPT in the lab report an example of academic dishonesty? Why or why not?*
- *Learning and Understanding: How might using ChatGPT in this way impact Alex's understanding of the physics concepts being studied?*
- *Responsibility and Accountability: What responsibilities do students have when using AI tools for their assignments? How can they ensure they are learning effectively?*
- *Future Implications: How might reliance on AI tools affect Alex's future studies and problem-solving skills in physics?*

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3. Reflection Phase - students write their reflections individually, thinking about their personal experiences and ethical considerations.

Students are provided with a reflection prompt: "In what ways can using AI tools like ChatGPT in physics be beneficial, and in what ways might it be harmful? How can you use these tools responsibly?".

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