

AI Topic: Limitations of AI in basic hardware/software problems

Learning Objectives:

1. Students will be able to identify and describe limitations of AI when encountering basic hardware/software problems.
2. Students will be able to discuss the importance of human intervention in problem-solving scenarios involving AI.

Materials:

- Pictures or illustrations of basic hardware/software problems
- Visual aids showing AI systems trying to resolve these problems

Activity Steps:

1. **Introduction (5 minutes):**
 - Show pictures or illustrations of basic hardware/software problems like a frozen computer screen or printer errors.
 - Discuss with students how AI may struggle to handle such situations due to its limitations.
2. **Modeling AI (10 minutes):**
 - Show visual aids or short videos demonstrating AI systems attempting to resolve basic hardware/software problems.
 - Point out instances where AI succeeds and where it fails to solve the issues.
3. **Group Discussion (10 minutes):**
 - Divide students into small groups and ask them to brainstorm scenarios where AI limitations can create challenges in everyday situations.
 - Have each group share their thoughts and discuss the role of human intervention in such cases.
4. **Reflection (5 minutes):**
 - Conclude by asking students to reflect on the importance of understanding AI limitations and the need for human oversight in complex problem-solving tasks.

Assessment:

1. **Written Response (DOK 2):** Ask students to write a short paragraph explaining one example of a basic hardware/software problem that AI might struggle to solve and why human intervention is crucial in such cases.
2. **Role-play Scenario (DOK 3):** Have students participate in a role-play activity where they act out a scenario involving an AI system facing a hardware/software problem. They should demonstrate the limitations of AI and propose solutions that involve human intervention.

Content:

- Visual aids showing AI systems in action
- Worksheets for written responses
- Role-play scenario prompts