

# Knowledge and Technology: AI, Knowledge, and Accountability

## Lesson 1: Opening Debate

**Focus:** *If an AI system makes a mistake, who is responsible: the programmer, the user, or the AI itself?*

Objectives	Explore different perspectives on the concept of accountability in AI-generated knowledge Reflect on the ethical and societal implications of AI decision-making
Activities	<ol style="list-style-type: none"><li><b>Introduction (5 mins)</b><ul style="list-style-type: none"><li>Present the central question and gather students' initial thoughts: <i>"If an AI system makes a mistake, who is responsible: the programmer, the user, or the AI itself?"</i></li><li>Share examples of famous AI failures to prompt students' responses:<ul style="list-style-type: none"><li><a href="#">Amazon scrapped "sexist" AI tool</a></li><li><a href="#">Tesla Autopilot: US opens official investigation into self-driving tech</a></li><li><a href="#">Apple suspends error-strewn AI generated news reports</a></li></ul></li></ul></li><li><b>Kialo Discussion (20 mins)</b><ul style="list-style-type: none"><li>Use the Kialo discussion: <a href="#">"If an AI system makes a mistake, who is responsible: the programmer, the user, or the AI itself?"</a></li><li>Students will respond to the three theses:<ul style="list-style-type: none"><li>The programmer is responsible because they designed the AI.</li><li>The user is responsible because they decided how to use the AI.</li><li>The AI is responsible as it made the decision.</li></ul></li><li>Example claims are listed below along with a reasoning prompt for students to explore.</li><li><b>Thesis 1: The programmer is responsible because they designed the AI.</b><ul style="list-style-type: none"><li>PRO: The programmer created the algorithms and training data that directly shape how the AI behaves.<ul style="list-style-type: none"><li>Counterclaim: Once deployed, the AI may act in unpredictable ways beyond the programmer's foresight or control, making full responsibility unreasonable.</li><li>Reasoning: To what extent should programmers be accountable for unintended consequences if their AI behaves in harmful or unexpected ways years after deployment?</li></ul></li></ul></li><li><b>Thesis 2: The user is responsible because they decided how to use the AI.</b><ul style="list-style-type: none"><li>PRO: The user is responsible because they chose to rely on the AI's output..<ul style="list-style-type: none"><li>Counterclaim: Users often lack the technical understanding of how the AI works, so blaming them for errors they couldn't anticipate is unfair.</li><li>Reasoning: Should users be required to meet certain standards of understanding before being allowed to use powerful AI tools?</li></ul></li></ul></li><li><b>Thesis 3: The AI is responsible as it made the decision.</b><ul style="list-style-type: none"><li>PRO: The AI is responsible because it autonomously made the specific choice or prediction that caused the mistake.<ul style="list-style-type: none"><li>Counterclaim: AI lacks consciousness and moral agency, so it cannot be meaningfully held accountable like a human can.</li><li>Reasoning: Can we ever treat AI as morally responsible agents, or is responsibility something only humans can bear?</li></ul></li></ul></li></ul></li><li><b>Debate (15–20 mins)</b></li></ol>

	<ul style="list-style-type: none"> <li>• Have students add arguments, counterarguments, and examples.</li> <li>• Encourage them to identify their own biases and assumptions, and to recognize and challenge biases in others. Emphasize respectful, constructive dialogue.</li> <li>• In this lesson, all student contributions should be based on their existing knowledge.</li> </ul>
<b>Reflection Questions</b>	<p><b>Reflection (10 mins):</b> Discuss the following reflection questions in open discussion or exit ticket format:</p> <ul style="list-style-type: none"> <li>• What does it mean to be responsible for knowledge creation?</li> <li>• How do different perspectives influence how we assign responsibility?</li> <li>• How should we respond when AI systems fail repeatedly?</li> <li>• Can responsibility be shared or must it lie with one party?</li> </ul>
<b>Resources</b>	<p>Lesson Slides</p> <p><a href="#">Kialo discussion: If an AI system makes a mistake, who is responsible: the programmer, the user, or the AI itself?</a></p> <p>Checklist for identifying biases and assumptions</p>
<b>TOK Concepts</b>	<p><b>Responsibility:</b> What does it mean to take responsibility for knowledge production?</p> <p><b>Perspectives:</b> How do values, norms, or local regulations shape our perceptions of AI accountability?</p> <p><b>Power:</b> How do existing power structures impact the development and deployment of AI technologies?</p>
<b>Critical Thinking Concepts</b>	<ul style="list-style-type: none"> <li>• <b>Confronting Biases and Assumptions:</b> <ul style="list-style-type: none"> <li>◦ Identifying Personal Bias: Encourage learners to reflect on how their own experiences and beliefs might skew their judgment.</li> <li>◦ Questioning Assumptions: Guide students to challenge taken-for-granted ideas, asking, "Why do we assume this?"</li> <li>◦ Recognizing Misinformation: Teach them to spot logical fallacies, one-sided arguments, or incomplete data in discussions.</li> </ul> </li> <li>• <b>Exploring Contexts:</b> <ul style="list-style-type: none"> <li>◦ Stakeholder Analysis: Prompt students to consider who is impacted by AI decisions (programmers, users, broader society).</li> <li>◦ Cultural and Societal Influences: Show how values, norms, or local regulations shape our perceptions of AI accountability.</li> </ul> </li> <li>• <b>Responsiveness and Flexibility of Thought:</b> <ul style="list-style-type: none"> <li>◦ Adapting Arguments: Remind students to refine or adjust their positions when new information emerges.</li> <li>◦ Comparing Contradictory Perspectives: Have them weigh opposing viewpoints critically to see if, or how, their stance might change.</li> </ul> </li> </ul>