Knowledge and Technology: AI, Knowledge, and Accountability

Lesson 4: Writing a TOK Essay

Focus: How can knowledge users develop strong, structured arguments?

the arts.)

Objectives	Write a coherent TOK essay paragraph that explores a knowledge issue related to Al. Incorporate real-world examples and counterclaims to deepen the argument. Engage critically with TOK concepts (e.g., bias, responsibility, perspective). Practice a structured approach to the TOK essay assessment.
Activities	Introduction (5 mins) • Guiding Question: "How do we develop a strong argument in a TOK essay?" • Recap: What makes a TOK essay unique? • Focus on knowledge (not merely opinions). • Use real-world examples drawn from multiple Areas of Knowledge (AOKs). • Include counterclaims. • Refer to TOK concepts (e.g., objectivity, perspective, power). • Reflect on the implications and limitations of your argument.
	 Break down an example paragraph of your choice with students. Ask them to annotate: Claim: The stance or argument addressing the TOK prompt. Example: A real-world situation supporting or illustrating the claim. Counterclaim: A contrasting perspective that challenges the claim. TOK Links: Explicit connection to TOK concepts (e.g., bias, responsibility, perspective) and reflection on how knowledge is produced or validated. Discussion Questions: How does the example strengthen the claim? Which Ways of Knowing (WOKs) or Areas of Knowledge (AOKs) are relevant here? Does the counterclaim effectively challenge the claim, encouraging deeper exploration? Teacher Tip: Show a quick visual of the TOK essay structure (introduction, body claims, conclusion), highlighting where this developed paragraph fits in.
	 Writing Task: Drafting a TOK Paragraph (15 mins) Select a prompt: Provide students with a list of essay prompts to choose from. These could be prompts that you've prepared (e.g., "Are Al-generated decisions truly the result of objective knowledge, or do they reflect human biases embedded in code?") or a prescribed title from the official IB list that ties to censorship/whistleblowing. Students plan the paragraph in a blank Kialo discussion, including notes on: Claim: A clear stance responding to the prompt (e.g., "Human programmers remain accountable for Al knowledge outputs because they determine the data and algorithms."). Example: A concrete case (e.g., self-driving car accident, Al-based court sentencing tools) demonstrating how accountability is shared or abdicated. Counterclaim: A nuanced alternative (e.g., "Once Al systems learn from massive datasets, accountability may diffuse beyond a single group of developers."). TOK Link: Reference how knowledge is generated, validated, or potentially distorted (e.g., bias in data sets, black-box algorithms, ethical frameworks). Write the paragraph: Emphasize clarity, coherence, and the TOK focus (not just describing the event but analyzing how it affects knowledge). Teacher Tip: Ensure students reference relevant AOKs (e.g., viewing Al accountability through ethical frameworks, or exploring how AI is transforming creative expression in



Students exchange their writing in pairs or small groups, and use the TOK essay checklist to give feedback. Use the following discussion points to help students' develop their feedback: Claim: Is it clearly stated, and does it tie back to the prompt? Example: Is it concrete, relevant, and well-explained? o Counterclaim: Is it meaningfully different or just a weaker version of the claim? TOK Link: Does it show awareness of how knowledge is justified, constructed, or challenged? Language and Clarity: Are there any vague statements or unclear references? If time permits, students revise immediately based on peer feedback. Reflection Reflection (10 mins): Discuss the following reflection questions in open discussion or exit ticket Questions format: What was the most challenging part of writing this? How do different perspectives influence AI accountability debates? How does this practice help prepare for the TOK essay assessment? **Extension / Homework** Option A: Expand the paragraph by adding another real-world example or a deeper analysis of the counterclaim. Option B: Research a different context (another region or era) to see if the claim holds universally or changes with cultural/political conditions. Option C: Draft an introductory or concluding paragraph linking the argument to a broader TOK theme (e.g., ethics of technology, the nature of bias, or trust in knowledge systems). Resources Lesson Slides **TOK Essay Checklist** Example TOK Essay prescribed titles TOK Bias and Responsibility: How can biases in data or algorithms shift the locus of responsibility? Concepts Perspective: Are certain voices left out of Al design, and how does that affect the knowledge produced? Ethical Implications: Should AI be treated as an independent knower or an extension of human agency? Knowledge Construction: How does Al's "black box" nature challenge our usual methods of validating knowledge claims? Critical Confronting Biases and Assumptions Thinking Questioning Assumptions: Students explore how Al systems can distort knowledge, Concepts either through biased training data, opaque algorithms, or selective content delivery. **Exploring Contexts and Expert Opinions** Analyzing Disciplinary Frameworks: Students analyze how disciplinary frameworks influence what is accepted as credible, objective, or ethically responsible knowledge, and how each expert's priorities shape their evaluation of AI systems. Responsiveness and Flexibility of Thought: Shifting Perspectives: Students adapt their reasoning and explore how knowledge claims about AI are shaped by context, purpose, and worldview. **Extrapolation and Reapplication of Principles:** Identifying Wider Implications: Students consider how the essay's conclusions might influence future policies, societal norms, or personal decision-making about emerging

technologies.

