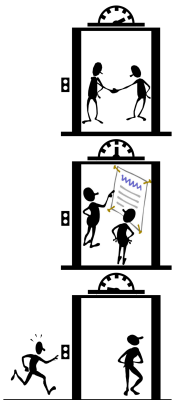


Directions

- An *Elevator Pitch* briefly explains an AI skill, activity or project (about as long as an elevator ride).
- Yours should take 60-90 seconds if you are explaining it in person. Use the form below to think through what might be important to share.
- Draft your pitch and consider how you will explain it to a partner.



Title:	Logical Fallacies Check
Grade/ Subject	5th grade and higher Any with argumentative essays
Overview/ Objective	<ul style="list-style-type: none"> • Using AI to offer formative feedback on students' argumentative writing, analysis of transcripts of a politician's speech, etc. • Students will be able to revise essays to strengthen arguments by eliminating logical fallacies • CCSS.ELA-LITERACY.W.8.1 - argumentative writing
Main Steps	<ul style="list-style-type: none"> • Highlight and copy your essay or a news story • Open MagicSchool.AI and select Raina (chatbot tool) • Type in the prompt, • Basic Prompt - "Can you check my essay for logical fallacies such as: Ad Hominem, Straw Man, Appeal to Authority, False Dilemma or False Dichotomy, Slippery Slope, Circular Reasoning, Hasty Generalization, Appeal to Emotion, or Red Herring?" Or, replace "my essay" with "this transcript" to analyze a political speech or "this story" to analyze a current event story. • Prompt for more analysis and support - "As an expert in rhetorical analysis and logical reasoning, can you evaluate this essay for common logical fallacies. Identify any instances of ad hominem, straw man, false dichotomy, hasty generalization, appeal to authority, or other logical fallacies. For each fallacy found, provide: 1) The type of fallacy, 2) The specific text excerpt containing the fallacy, 3) A brief explanation of why it qualifies as that fallacy, and 4) A suggestion for how to revise the argument to eliminate the fallacy. Present your analysis in a clear, organized format." • Paste in your essay or news story • Press the enter/return key, or Click on the → button • AI Discussion - see section below
Meta AI Questions	AI Discussion - Could be discussed in small groups, whole class, or via an online discussion <ul style="list-style-type: none"> • How accurate do you think the AI's analysis was? Were there any fallacies it identified that you disagree with or hadn't noticed before?

	<ul style="list-style-type: none"> • How did the AI's analysis compare to your own assessment of the logical reasoning in the text? • How might awareness of these logical fallacies change the way you approach writing or analyzing arguments in the future? • Do you think the author intentionally used any of these fallacies? • In what ways could this AI tool be helpful for improving critical thinking and argumentation skills? • What are the potential limitations or drawbacks of relying on AI for this type of analysis? • What other important questions should we consider about AI and logic analysis?
Materials	<ul style="list-style-type: none"> • MagicSchool.AI
MagicSchool Tool	<ul style="list-style-type: none"> • Raina
AI Affordances	<ul style="list-style-type: none"> • Students struggle most with <i>Reasoning</i> when focusing on Claim, Evidence, Reasoning (CER). AI can increase students' awareness of weaknesses in their reasoning as well as their ability to recognize it in others writing or speech. • The AI can offer support to help students understand why something is a logical fallacy and potential remedies.
AI Constraints	<ul style="list-style-type: none"> • Contextual Understanding: AI may struggle to fully grasp the nuanced context of an argument, or if the evidence and reasoning are not obviously connected by the student, which is crucial for accurately identifying some fallacies. • Sarcasm and Humor: AI often struggles with detecting sarcasm or humor, which could lead to misidentifying satirical arguments as genuine fallacies. • Overconfidence or Overreliance in AI: Students might be tempted to accept the AI's analysis without critical evaluation, potentially leading to overreliance.
Related Links	<ul style="list-style-type: none"> • The Guide to Common Fallacies
Full Lesson Ideas	<ul style="list-style-type: none"> • Start with a mini-lesson on logical fallacies if students are new to them • Have students create infographics for common logical fallacies - could include collaborative learning by implementing a jigsaw activity where small groups become experts on specific fallacies <ul style="list-style-type: none"> ◦ The infographics could contain students criteria and tips for identifying fallacies ◦ The infographics could be part of a media campaign to educate peers about recognizing and avoiding fallacies in arguments • Have students analyze pre-selected texts with clear examples of fallacies before critiquing their own or a partner's • Have students go on a logical fallacy "scavenger hunt" using real-world advertisements or political campaign materials • Add a peer review component prior to using the AI analysis • Have students work with a partner during the AI analysis • Real-world task - students write letters to local newspapers or politicians identifying fallacies in published articles or speeches, and suggesting improvements • For advanced learners: Challenge them to create their own texts with intentional fallacies for peers to analyze

