Logical Reasoning

Lesson Focus: How do weak arguments differ from strong ones?		
Learning Objectives	Vocabulary	Links with Approaches to Learning (ATL)
- To understand a range of fallacies and other features that weaken arguments. - To identify examples in a discussion.	fact falsehood opinion fallacy premise conclusion logical	**Thinking Skills** Recognize the features that strengthen or weaken an argument.
Preparation Tasks	Differentiation	
- Clone the following discussion and share it with students: Should environmental conservation take precedence over economic growth? Ensure that groups have Admin permissions. - Ask students to research different types of fallacy. - Useful links: - Logical Fallacies - Fallacies - The Background Info section of the main lesson discussion also contains some wider reading links that students may find helpful.	**Support:** Provide students with a glossary of different types of fallacy. Use the suggested responses to guide students. **Extend:** Provide students with a copy of Bloom's Taxonomy and ask them to identify the skills they have used within today's lesson.	

Introduction: Features that weaken arguments

- Ask students to think of a range of features that weaken arguments.
  - Guide them to think of features like falsehoods, opinions, misinformation, and off-topic arguments, as well as the fallacies that they've researched as a preparation task.
  - Make a list of features for students to refer to in the main activity.
- Split students into pairs or small groups and allocate each pair or group one of the following fallacies: appeal to tradition, appeal to fear, appeal to authority, slippery slope fallacy, or circular argument.
- Provide students with the following statement: *We need to reduce plastic use to protect the environment.*
- Students should rewrite the statement to change it into an example of their allocated fallacy.
  - Example for appeal to tradition: *We've always relied on plastic for packaging and convenience, so we should continue using it.*
- Ask each group to present the fallacy they created. The other groups should then identify the type of fallacy and reframe the claim to correct the fallacy.

Main Activity: Application in a Kialo discussion

- Explain to students that they will become the teachers in this activity.
- Students should work in the same small groups as the introduction.
- Give each group their own version of the completed discussion Should environmental conservation take precedence over economic growth?
  - Ensure that groups have Admin permissions. This will allow them to use the Grading and Feedback feature to engage with the discussion as intended. (Students will need to be able to use the discussion features responsibly.)
- As students read through the claims in the discussion, they should use the list from the lesson introduction to identify strong and weak arguments.

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- Students should then use [Grading and Feedback](#) to grade each claim according to its strength and add a written comment to justify their grading. In particular, students should identify fallacies where they spot them, and highlight assumptions where they are being made.
    - Use the Suggested Responses document as a guide.

Reflection Activity

- Select three of the weakest claims from the discussion.
- Ask students to share their grades and their justifications.
- As a class, rewrite the three claims to strengthen them.
- Close the session with the following reflection questions:
    - Have you ever encountered an argument online or in the news that seemed convincing at first but later turned out to be misleading? What helped you recognize the problem with it?
    - Why do you think people often use fallacies — even unintentionally — when arguing about complex issues? What risks does this pose in public discussions?
    - How can the ability to spot weak arguments or fallacies help you make better decisions?

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