



Lesson 12

Logical Fallacies

Preparation time: 30'

Teaching time: 1 x 60'

Abstract

This lesson explores logical fallacies, which are errors in reasoning that weaken arguments and can be used to manipulate audiences. Students will learn to recognize and analyze common fallacies that people often use without being aware of them. They will engage in discussions, practical exercises, and debates to develop their critical thinking skills and ability to construct sound arguments. This lesson is designed to enhance students' reasoning skills, improve their ability to evaluate arguments, and strengthen their capacity to engage in logical discourse.

Online educational resources

- [Thou Shall Not Use Logical Fallacies](#) (website with posters, resources)
- [Your Bias Is](#) (website on cognitive biases)
- [PRECOBIAS](#) pedagogical resources (lesson plans on critical thinking)
- [Online quizzes on logical fallacies](#)

Keywords

*Logical Fallacies,
Critical Thinking,
Argumentation,
Misinformation,
Cognitive Bias*

Lesson aim

The objective of this lesson is to equip students with the ability to identify and avoid logical fallacies in arguments. By understanding the mechanisms behind flawed reasoning, students will enhance their own critical thinking, argument evaluation, and communication skills. The lesson also aims to make students more resilient against misinformation, enabling them to engage more thoughtfully with new information and in discussions.

Lesson outcome

By the end of the lesson, students will:

- Understand what logical fallacies are and why they are problematic.
- Be able to identify and analyse common logical fallacies.
- Improve their reasoning and argument construction.
- Learn to engage in discussions and debates while practicing logical reasoning skills.
- Recognize the role of cognitive biases in fallacious reasoning.

Lesson implementation process

min. 1 - 5: Warming Up

- Start with an interactive poll: “What is a widespread misleading argument? What makes it misleading?” (Use tools like Mentimeter or Poll Everywhere.)
- Display a famous example of a logical fallacy (e.g., a well-known political or advertising claim).
- Briefly introduce the concept of logical fallacies and outline the lesson objectives.

min. 11 - 30: Collaborative Learning

- Discuss notable logical fallacies using real-world examples that students can commonly identify
- Students work in small groups to identify fallacies in provided statements.
- Discussion on why these fallacies are persuasive and how they can be misleading.

min. 31 - 50: Practical Application

- Analyse common logical fallacies in media, advertising, and debates.
- Role-playing activity: Students engage in mock debates where they must detect and call out fallacies in their opponents’ arguments.
- Use online tools and quizzes to test fallacy recognition skills.

min. 51 - 60: Conclusion

- Recap the key points of the lesson
- Reflective discussion: “How can the skills discussed in this lesson be applied in academic writing, debates, and personal discussions?”
- Encourage students to keep practicing by analysing media and arguments they encounter daily.

Materials / Tools

Video projector, laptop/desktop, internet connection; Examples of logical fallacies in media (ads, political speeches, debates); Worksheets with fallacy identification exercises; Access to online verification tools and quizzes; Debate prompts and discussion questions.