

Being Creative by Doing the Opposite of AI

Why?

This lesson plan encourages students to explore creativity and critical thinking by contrasting AI-generated ideas with their opposites. It highlights the value of unique perspectives in creative writing and/or problem-solving. By analyzing and flipping AI-generated responses, students can develop a deeper understanding of how common ideas can be innovatively challenged.

Materials Needed

- Computers or tablets with internet access
- Access to ChatGPT or another generative AI tool
- Notebooks and writing materials

Time needed

Approximately 45 to 75 minutes

Objectives

Students will be able to...

- Generate ideas using AI technology.
- analyze and interpret AI-generated content to form contrarian views.
- engage in creative writing or problem-solving by formulating unique responses to common ideas presented by AI.

Key Concepts & Vocabulary

- **AI-generated content:** Information produced by artificial intelligence systems based on patterns in data.
- **Contrarian view:** A perspective that opposes or differs significantly from a commonly held belief.
- **Critical thinking:** The objective analysis and evaluation of an issue in order to form a judgment.

Lesson

1. **Introduction:** Introduce the concept of AI and how it generates ideas based on common human responses. Explain that generative AI is trained by “reading” text and then trying to make its text sound like humans sound.
2. **AI Demonstration:** Demonstrate how to use ChatGPT by asking it to generate ideas on a familiar topic. For example, you could have it complete a sentence, such as “Finish the sentence in 10 different ways: I would like a cup of...” It is likely that the sentence completions will all be fairly normal things that people drink out of a cup, such as “rich hot chocolate” or “tangy lemonade”
3. **Student Exploration:** Students use ChatGPT to generate ideas on selected topics. Like your example, students can ask the AI to provide 10 different ideas for a prompt.

- a. Some examples of types of topics students could explore:
 - i. Creative Writing - Unique superhero abilities; Futuristic technologies; Alternate outcomes of historical events
 - ii. Problem/Solution - Animal conservation; Pollution control; Bullying prevention
4. **Analysis Session:** Students write down the AI responses and brainstorm what the opposite ideas would be. Explain the concept of a “contrarian idea” - “A viewpoint that opposes or challenges the commonly accepted or popular opinions on a subject. Looking at a problem or a question from a completely different angle, questioning what people would likely assume.”
 - a. For a problem/solution example, for the problem of wildlife conservation, ChatGPT provides the possible solution: “Wildlife Corridors: Establish corridors between protected areas to allow safe animal migrations and reduce the risk of roadkill.”
 - i. An opposite to that would be to make the majority of the area protected, and have human corridors instead – maybe tunnels that go completely under a wildlife area.
 - b. For a creative writing example, for the prompt about unique superhero abilities, ChatGPT provides the following idea: “Emotion Manipulation: The power to amplify, reduce, or alter the emotions of others, which can be used to calm hostile situations or energize allies.”
 - i. An opposite to that would be emotional invulnerability – A superhero who is completely unaffected by attempts at emotional affect.
 - c. If they ask for a list of 8-10 suggestions, students could come up with an opposite for each, or opposites for several, or try to find an option that is very different from multiple members of the list.
5. **Creative Writing/Problem Solving:** (This step and the next step could be done in a later class period depending on time available.)
 - a. Using their contrarian ideas, students either write a short story, a poem, or propose a solution to a problem that defies the common solution. If having them propose solutions to topical issues, students could write an op-ed style article or a letter to an elected official advocating for their solution.
6. **Sharing and Feedback:** Students share their work with the class. Peers provide feedback on the creativity and uniqueness of the ideas.

Discussion Questions

- Why do you think most people tend to follow popular opinions? What are the benefits and drawbacks of this tendency?
- Can you think of a time when going against the common viewpoint would have been beneficial? Describe the situation.
- How does being contrarian affect a person's relationship with others? Can it be isolating, or could it lead to leadership?
- What are the risks of always adopting a contrarian viewpoint?
- How can we tell the difference between being contrarian for a valid reason and

just being contrary?

- How do you think AI's ability to generate common ideas influences our perception of creativity?
- Do you believe AI-generated ideas limit our creativity or expand it?
- How can thinking about the opposite of AI-generated ideas help us discover new, potentially innovative solutions?

Supplemental Activity Ideas

- **Role Reversal Debate:** Students use AI to generate arguments on a debatable topic, then must argue the opposite side.
- **Contrarian Art:** Create artworks based on the most common themes suggested by AI, then create a piece that represents the opposite theme.
- **Daily Contrarian Journal:** For one week, students write daily journal entries about their day but focus on imagining an opposite day, or responding in the opposite way to how they did respond the first time.

Sources to Learn More

- "ChatGPT: A creative tool or a threat to human creativity?" - <https://creative.salon/articles/features/gotw-chatgpt-creative-tool-threat-to-creativity>
- "Whatever ChatGPT says on creativity, do the opposite" - <https://www.prweek.com/article/1812241/whatever-chatgpt-says-creativity-opposite>