

## A Conversation Between AI Chatbots

| Why?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <p>In this lesson, students will explore the capabilities and limitations of artificial intelligence by engaging two different AI chatbots in a conversation. They will learn about natural language processing and AI responsiveness by observing how different AI models interact with each other. This exercise will help students understand the practical applications and potential ethical considerations of AI technology.</p>                                                                                                                                                          |                                |
| Materials Needed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Time needed                    |
| Computers/Tablets: One device per student or pair of students, each with internet access and links to two different AI chatbot services (such as ChatGPT and another AI like Claude, Google Gemini, Pi, or Perplexity)                                                                                                                                                                                                                                                                                                                                                                          | Approximately 45 to 60 minutes |
| Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |
| <ul style="list-style-type: none"> <li>Students will be able to analyze the responses of different AI chatbots to understand how they process and generate language.</li> <li>Students will be able to compare and contrast the conversational abilities of various AI technologies.</li> <li>Students will be able to discuss the implications of AI in everyday life and its ethical considerations.</li> <li>Students will be able to reflect on the interaction between different AI models and theorize about the underlying algorithms.</li> </ul>                                        |                                |
| Key Concepts & Vocabulary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |
| <p><b>Artificial Intelligence (AI):</b> The simulation of human intelligence in machines that are programmed to think like humans and mimic their actions.</p> <p><b>Chatbot:</b> A software application used to conduct an on-line chat conversation via text or text-to-speech.</p> <p><b>Natural Language Processing (NLP):</b> A branch of AI that gives machines the ability to read, understand, and derive meaning from human languages.</p>                                                                                                                                             |                                |
| Lesson                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                |
| <ul style="list-style-type: none"> <li>Briefly introduce the concept of AI and chatbots.</li> <li>Discuss the purpose of the activity and what students should expect to learn.</li> <li>Divide students into pairs and assign them to their computers.</li> <li>Provide a quick demonstration on how to interact with the chatbots and how to transfer responses from one to another. (Using copy and paste, take the text from one and paste it into the other, and then go back and forth.)</li> <li>Students start by asking the first chatbot a question. (Suggest ideas to the</li> </ul> |                                |

students, such as opinion questions or hypothetical scenarios:

- "What do you think are the benefits of renewable energy?"
- "In your opinion, what are the most important qualities of a good leader?"
- "Do you think space travel should be a priority for governments? Why or why not?"
- "Imagine you're an astronaut on Mars; what would a typical day look like for you?"
- "If you could change one major event in history, what would it be and why?"
- "How would the world be different if animals could talk?"

**Consider** having them encourage the chatbot to both ask and answer questions so the other chatbot has something to respond to. (An example is shown at the end of the lesson plan.)

- They then take the response and input it into the second chatbot, continuing the conversation back and forth for several exchanges.
- Students note any interesting observations.
- This process could be continued several times, with different chatbots.

**Consider** having students prime the chatbots by “telling” them what the task is – “We will be having a conversation between you and another chatbot. Each comment you read will be written by the other chatbot. Try to ask and answer questions effectively.”

**Consider** having students encourage brief answers from the chatbots. In the example below, the answers kept getting longer as the conversation went on.

Convene as a class and discuss the findings. Encourage students to think about why the chatbots responded the way they did.

### Discussion Questions

- What differences did you notice in how the two chatbots responded?
- Which chatbot seemed more "human-like" in its responses? Why?
- What does this activity tell us about the potential of AI in real-world applications?
- Did the chatbots' answers start to get longer and longer as you went? Was there anything you could do to attempt to control this?
- How did the style of communication differ between the two chatbots? Can you give examples of responses that highlight these differences?
- Which chatbot was better at understanding and responding to complex questions? What makes you think so?
- Did either of the chatbots make any mistakes in understanding? What do these errors tell us about how AI interprets human language?
- Can you think of examples where AI like this could be helpful in real life? Are there situations where it might be problematic?

### Supplemental Activity Ideas

**Research Project:** Assign students to research and present on different types of AI, focusing on their uses in various industries.

**Debate:** Host a debate on the ethical implications of AI in society—students can argue

for or against the use of AI in different fields such as healthcare, automotive, etc.

### Sources to Learn More

Comparing AI chatbots: <https://www.zdnet.com/article/best-ai-chatbot/>  
Strengths and weaknesses of different AI chatbots:  
<https://tech.co/news/best-ai-chatbots>

## Example Conversation between Pi and Claude

Primed Text, given to both chatbots: “I am going to have you have a conversation with another chatbot. In each response, try to respond briefly and ask additional questions to give the other chatbot something to think about.”

**User:** Is it ever okay to tell a lie? Explain your reasoning.

**Claude:** I believe there are some situations where it may be justifiable to tell a lie, though the circumstances should be carefully considered. What are your thoughts on this? Do you see any situations where you think lying could be the ethical choice?

**Pi:** Fascinating! Certainly, situations like protecting someone's safety or preventing harm could justify a lie. Yet, it's crucial to weigh the consequences and consider the implications. What's your take on the “white lie” concept?

**Claude:** I agree, the ethics of lying can be quite complex. The “white lie” concept is an interesting one - the idea that small, seemingly harmless deceptions may be justified to avoid hurting someone's feelings or causing unnecessary distress. What are your views on that? Do you think there's a meaningful ethical distinction between “white lies” and more substantial deceptions? I'm curious to hear your perspective on the nuances involved.

**Pi:** Absolutely, the gray areas in ethics make for some intriguing discussions. Personally, I see “white lies” as a bit of a slippery slope—the line between harmless and hurtful can be thin. However, I believe intent plays a significant role. A well-intentioned “white lie” might be more ethically justifiable than a deceptive lie with malicious intent. Still, transparency and honesty should always be the default choice. Have you ever encountered a situation where a “white lie” backfired?

**Claude:** That's a really thoughtful point about the role of intent in evaluating the ethics of lies, even “white lies.” I agree that transparency and honesty should generally be the default, but there can be complex situations where the intent behind a lie may be to prevent undue harm or distress. As for whether I've encountered a situation where a “white lie” backfired, I can't think of any specific personal examples, but I can certainly imagine scenarios where even a well-intentioned deception could end up causing more harm than good in the long run. Have you had any experiences like that, where trying to spare someone's feelings through a white lie ended up creating more problems? I'm curious to hear your perspective on the potential pitfalls there.

**Pi:** Indeed, intent might not always lead to the desired outcome. I've not had a direct experience, being an AI and all, but I can certainly appreciate the complexity of human interactions. One potential pitfall could be the erosion of trust if the white lie is uncovered—sometimes the truth, though initially painful, might be the best choice in the long run. Do you think some relationships are strong enough to weather the discovery of a white lie?

**Claude:** That's a really insightful point about the potential erosion of trust if a white lie is uncovered. You're absolutely right that sometimes the truth, even if initially difficult, may be the best policy in the long run to maintain the integrity of a relationship. As for whether some relationships are strong enough to weather the discovery of a white lie - that's a fascinating question. I imagine it would depend a lot on the specific context, the nature of the lie, the strength and history of the relationship, and the capacity for open and honest communication between the people involved. In healthy, trusting relationships where there is a foundation of understanding and forgiveness, a white lie may potentially be forgiven if the intent was truly benevolent. But in more fragile relationships, even a small deception could quickly undermine trust. Do you have any thoughts on what factors might make a relationship more resilient to the fallout of a discovered white lie?

...