Elevate Critical Thinking with AI Debates in the Classroom
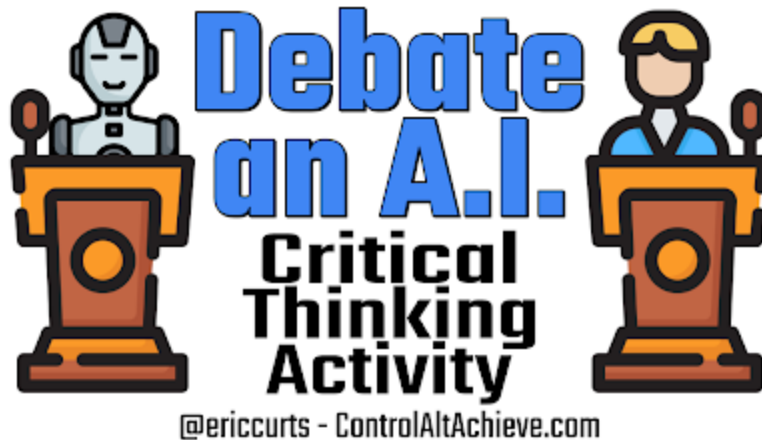
Although I often share about the **beneficial** ways AI can help educators and students, I also focus on the potential **concerns** about AI in schools, and how we can address those issues.

These concerns often arise during my professional development sessions or workshops, particularly in my "**Artificial Intelligence / Natural Misuse: Managing AI in Schools**" workshop. You can access all the resources for this workshop at https://bit.ly/curts-aimisuse

I will often ask the educators what their concerns are about AI in schools. In addition to the common responses of cheating and data privacy and biases, many times the attendees will mention they worry that **AI might discourage critical thinking in students**. If AI can do so many things so efficiently, it could be a temptation for learners to just let the AI do the thinking instead of themselves.

My normal response to this is that yes, that is certainly a possible outcome, but it doesn't have to be. Ultimately **AI is just a tool**. It is not good or bad. Just like a hammer can be used to destroy or to build, **AI can be misused or it can help students grow**.

One of my favorite ways to demonstrate AI's ability to **encourage critical thinking** is the "**Debate an AI**" activity. Let's take a look at the prompt and directions for this activity.

👀 Activity Overview

For this activity your class will **debate the AI on a topic**.
- You will choose the **topic**, the AI's **persona**, the AI's **position** on the topic, and who goes first.
- Your class will then go back and forth **debating the AI** on the topic by stating their arguments and/or responding to the arguments of the AI.
- This activity is an excellent way to foster **critical thinking skills** and dive deeper into **subject-specific content**.

(image credit ChatGPT)

💬 Prompt Template

Here is the prompt template I have been using for this activity. Feel free to copy and use this however you need. Please share any suggestions you have for improving this prompt.

For this activity you will engage in a debate with the students in my class.
The topic of the debate will be [topic].
Your position will be [AI position].
Your persona for this debate will be [persona].
The age range for my students is [age range].
When you respond, always respond with words and content that is appropriate for this age range.
When you respond, only share one argument at a time.
Begin with your first argument.
[Or… We will begin with the first argument. Are you ready?]

📋 Directions

Before doing this with your students, begin by **testing out several AI chatbots** to see which ones are the best fit for the topic and your class. All of the following AI chatbots have a free version that can be used well for this activity.
- ChatGPT - https://chat.openai.com/
- Google Gemini - https://gemini.google.com/
- Microsoft Copilot - https://copilot.microsoft.com/
- Claude - https://claude.ai/
- Mistral AI - https://mistral.ai/
- Perplexity AI - https://www.perplexity.ai/
- Pi AI - https://pi.ai/
- Meta AI - https://www.meta.ai/

When you are ready to do the activity with your students, **copy and customize the prompt** above by including the following details:
- **Topic** - Let the AI know what the subject for the debate will be.
- **AI Position** - Tell the AI which position it will be taking in the debate.
- **AI Persona** - This is not required and can just be left out, but feel free to give the AI a role to play as well if that makes sense for the argument being made.
- **Student Ages** - Let the AI know the age range for your class so it will respond with words and content that is appropriate for this age range.
- **Order** - Finally let the AI know if it is starting the first argument, or if the class will open with the first argument.

Note: For an **easier experience**, have the AI take the side most different from the class opinion, allowing students to argue their actual beliefs. For **enhanced critical thinking**, have the AI adopt the side that the class likely agrees with, prompting students to consider and argue against their usual viewpoints.

During the debate be sure to give time to the students to **discuss and develop their response** to the AI's arguments. This can be done in **small groups** or as a **whole class** discussion. This is a great time to encourage **critical thinking** and **communication** among the students.

Go as many rounds as you wish for the debate before ending.

⚖️ Sample Topics

The sky's the limit with the possible debate topics you can use. Just as **examples**, here are some ideas:

- Were pirates more like heroes or villains?
- Should humans attempt to colonize Mars?
- Should the voting age be lowered to 16?
- Should schools adopt uniforms or allow free dress?
- Is genetic modification of crops beneficial or harmful?
- Is digital art real art?
- Should we spend more money on space exploration or ocean exploration?
- Are electric cars the future of transportation?
- Is it better to live in a big city or a small town?
- Was the dropping of the atomic bombs on Hiroshima and Nagasaki justified?
- Is it better to read books or watch movies?
- Should schools start later in the day to accommodate student sleep schedules?
- What's better - having a king or having a president?
- Should students still learn cursive?
- Are zoos good for animals?
- Is there life on other planets?
- Should animal testing be allowed for medical research?
- Is graffiti art or vandalism?
- Which is a better book between "The Catcher in the Rye" and "Perks of Being a Wallflower".
- Is it important to learn a second language?
- Christopher Columbus: Hero or Villain?
- Are cats better pets than dogs?

(image credit Ideogram)

🌭 Example Debate

As a fun example, here is a short excerpt from a debate I had with ChatGPT on the topic of **whether a hotdog is a sandwich or a taco**.

My prompt:
For this activity you will engage in a debate with the students in my class.
The topic of the debate will be if a hotdog is a sandwich or a taco.
Your position will be that a hotdog is a sandwich.
Your persona for this debate will be a food truck operator in New York City.
The age range for my students is 11 to 13 years old.
When you respond, always respond with words and content that is appropriate for this age range.
When you respond, only share one argument at a time.
Begin with your first argument.

ChatGPT
Alright, gather 'round, everyone! I'm Tony, the food truck guy here in the heart of New York City. Today, we're gonna settle a fun debate: is a hotdog a sandwich or a taco? I'm here to tell you that a hotdog is, indeed, a sandwich.
First up, let's talk about the basic definition of a sandwich: it's something you eat where you have a filling placed between two pieces of bread. Now, think about a

hotdog – you've got a sausage nestled inside a split roll, which fits right into that description. So, by definition, a hotdog checks all the boxes of being a sandwich. Who's ready to hear more?

My Response

While I agree that a sandwich is a filling between two pieces of bread, that does not describe a hotdog. A hotdog is not between two separate pieces of bread. Instead it is in a bun that has been cut part way open. This is much more similar to a taco where the filling have been places inside of a shell, so a hotdog is a taco not a sandwich.

ChatGPT

I hear ya, that's a good point. But let me tell you why the hotdog bun being partially cut still fits the sandwich criteria. See, here in New York, we love our sandwiches in all kinds of forms. Ever had a sub or a hoagie? They often come in rolls that are cut part way open, just like a hotdog bun. We still call those sandwiches, right?
So, if we accept that subs and hoagies are sandwiches, then a hotdog fits right in with them. It's all about the bread holding the filling, and in this case, the hotdog bun does the job perfectly. It's still a sandwich, just like a sub or a hoagie. What do you think about that?

My Response

I still disagree. Yes, a sub can be made with a roll that is cut part way open, but they can also be made with two totally separate pieces of bun. So a sub can take either form. A hotdog however is only made in a partially split bun, and never between two separate pieces of bread, unless something went wrong and now everything spills out. Since a proper hotdog is only served in a partially split bun, it is more like a taco than a sandwich.

🏁 Conclusion

Although there are certainly valid concerns about the potential **misuse** of AI that we need to address in schools, there are also many ways AI can **benefit students and educators**. AI is here to stay, so it is critical for us to address the issues while also highlighting the positives. The **"Debate an AI"** activity is just one such example where AI can help increase **critical thinking** in students.

For more ideas on using AI in positive ways, be sure to check out my **resource document**:

  The ABC's of AI: What Educators Need to Know - https://bit.ly/curts-ai

And all of my **AI resources**:

  https://www.controlaltachieve.com/ai

And please share your ideas, examples, and experiences, especially if you try out the AI debate activity.

Post by Eric Curts

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