Parent's Guide to Talking to Children About Artificial Intelligence (AI) Foundations Using Minecraft Education

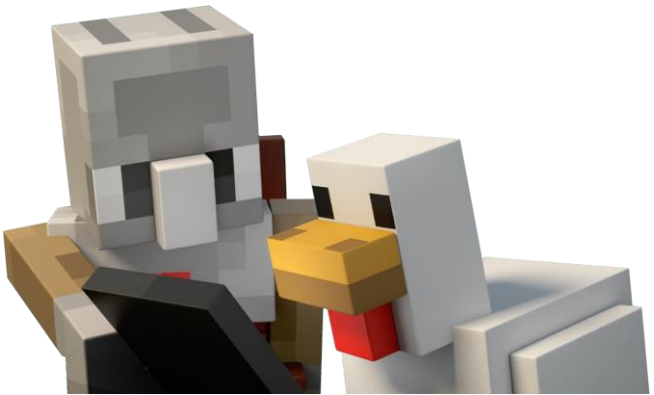
Purpose: This guide is intended for families to use as a companion when sharing the **AI Foundations** animated series: **"AI Adventurers."** This guide can serve as a comprehensive framework for parents to engage their children in meaningful conversations about AI, helping them understand its impact and ethical concerns, while also fostering a healthy curiosity about the technology shaping their world.

This guide includes: a list of vocabulary terms used in the animated videos, a discussion guide for families to facilitate conversations, and question cards to help young learners prompt discussion with easy to reference questions. You can also reference the educator's guide available for this video collection **here**.

What is Minecraft Education?

You may already be familiar with or have heard of Minecraft, the popular game that has captured the hearts and minds of millions of players around the world. However, you may be wondering how Minecraft Education differs and what are the benefits of leveraging it in a classroom setting.

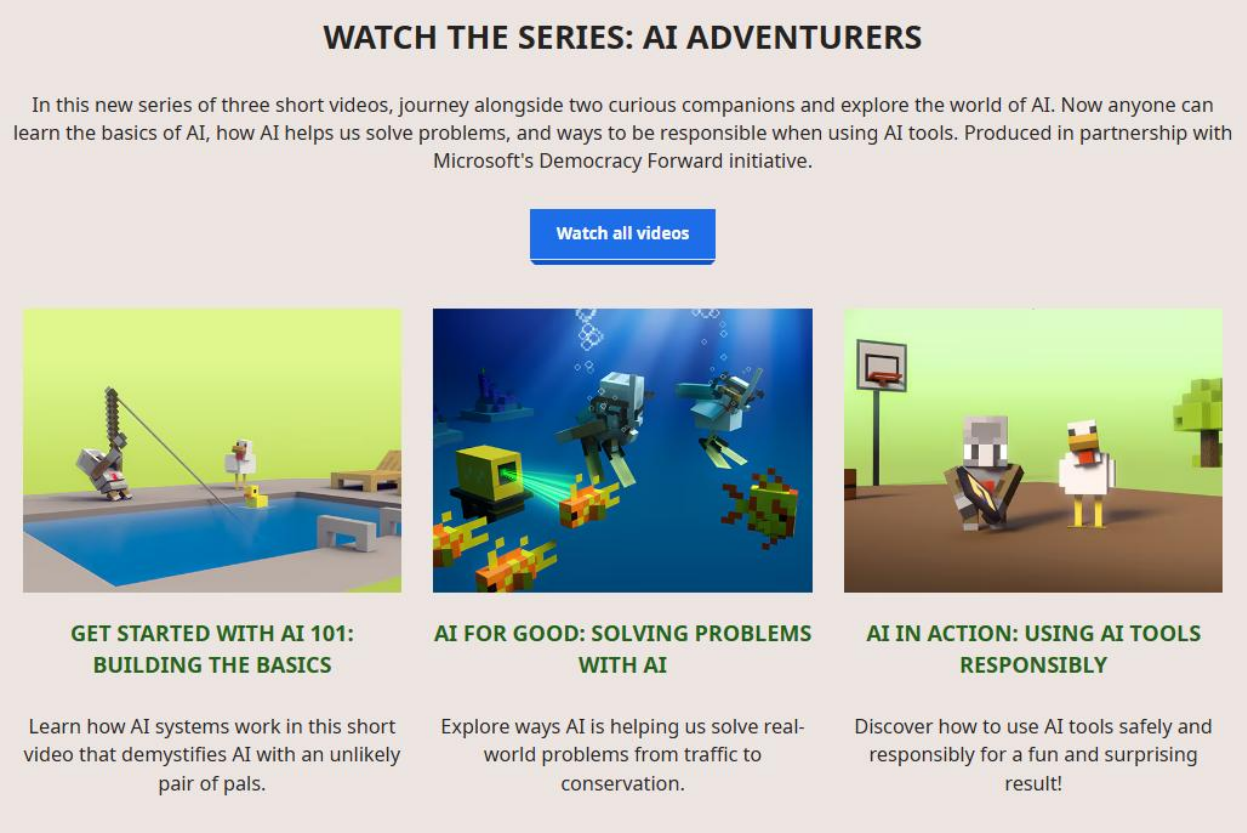
As an educational tool, **Minecraft Education** offers a unique and immersive learning experience that can engage and inspire your child's curiosity, creativity, and critical thinking skills.



AI Adventurers

WATCH THE SERIES: AI ADVENTURERS

In this new series of [four short videos](), journey alongside two curious companions and explore the world of AI. Now everyone build their AI literacy. With these videos and guide, learn the basics of AI, how AI helps us solve problems, and ways to be responsible when using AI tools.



Vocabulary

The terms are covered in the video collection. Families should familiarize themselves with the terms before viewing the videos. A few terms are not specifically mentioned in the video but are required for understanding artificial intelligence and its impact on our society.

Suggested Vocabulary Activities for Families:

- Say the word and show your child the word written out. Ask them if they have heard the word used before and to predict its meaning.
- Find an image for each word after an internet search. Show your child the image to help them predict its meaning.

algorithm: refers to programs or machines that simulate tasks that typically require human intelligence, such as: recognizing patterns, making predictions, and generating new content.

algorithmic bias: is the lack of fairness in the outputs generated by an algorithm. Or repeated errors that provide privilege to one group of users over another.

artificial intelligence (AI): refers to programs or machines that simulate tasks that typically require human intelligence.

AI-generated images: Pictures made by AI that may not be real or physically possible.

AI Foundations (AI Literacy): AI literacy involves having the skills and competencies required to use AI technologies and applications effectively and ethically.

AI Model: a computer model designed to perform tasks that normally require human intelligence.

automate: to have a machine or device carry out a task.

chatbot: A chatbot is a type of generative AI that can create **new content,** such as images, text, or music, based on patterns and data it has been trained on.

classical AI: This type of AI is not new and has been in our everyday lives for quite some time. It can solve problems, but this type of AI does not learn from data like newer AI.

cross-check: Double-checking information by looking at other trusted sources to verify accuracy.

facial recognition technology is a form of artificial intelligence (AI) that copies a human's ability to recognize human faces.

generative AI: is a powerful category of AI that includes models that generate text, images, videos, or music.

machine learning: a subset of AI that deals with the ability of machines to learn from data and patterns without being programmed to do so.

pattern recognition: the ability of machines to identify patterns in data, and then use those patterns to make decisions or predictions using computer algorithms.

prediction: A statement that something might happen or is expected to happen, such as the weather.

Predictive model: Predictive (AI) models predict something based on a set of features.

programmer: A person who writes programs for a computer.

prompt: is a set of instructions given to an AI tool to help it focus on a specific topic, task, or purpose.

reliable source: A person, website, or resource you can trust to give accurate and truthful information.

visual clues: Details in images that help identify if something is real or AI-generated (like impossible angles, distorted features, or unrealistic elements).

verification: The process of making sure information is true by checking multiple sources.

Discussion Guide for Videos

This section is a companion for using the video collection to provide students with artificial intelligence (AI) foundational knowledge, otherwise known as AI literacy. AI literacy involves having the skills and competencies required to use AI technologies and applications effectively and ethically.

Suggested Use: Pose the big question for each section to set the stage for that portion of the video. Pause and then engage in discussion of the answers according to the recommended time stamps or wait until the conclusion of the video to use the questions to monitor your child's comprehension and to have a discussion around the content.

Video 1: "AI 101: Building the Basics"

Begin the video, stopping at the ***suggested*** time marks for questions, or use the questions after the video for discussion. Possible responses are included.

Big Question: Is artificial intelligence helpful?

(0:00-0.30)

1. Is finding information a lot like fishing?
    a. *Students' answers may include that it requires patience, having the right tools for the task, and a good technique.*

2. How can artificial intelligence help us?
    a. *Answers will vary. This topic will be addressed in a later video.*

Big Question: How is artificial intelligence created?

(0:30-1.01)

3. What is the first step for an AI model to be trained? Who does this training?
    a. *Programmers must teach the AI model. This is done by giving the model a lot of information on different things.*
4. Let's think about Chicken training with huge amounts of information on "lots of different things," why is this important?
    a. *This is important because the model has a lot of information and can find patterns and make accurate predictions*.

Big Question: How is artificial intelligence created?
(1:02-2:12)

5. What happens after Chicken is done looking at information?
    a. *It finds patterns and makes predictions.*

6. How does the AI model find patterns?
    a. *By analyzing all the information, it receives (millions and millions).*

7. Let us think about one of the examples that Chicken gave us: why would books about tigers mention cats, but websites about cats rarely mention cars?
    a. *Cats and tigers are in the same animal family, but cars are a completely different subject.*

8. Why might an AI tool predict that whales live in lakes?
    a. *An AI tool might predict that whales live in lakes because lakes are a body of water, and whales live in water.*

9. Do you think AI is always correct? Can you think of some ways we can check if AI is correct?
    a. *Answers will vary. We can check if AI is correct by looking at other information sources.*

Video 2: "AI for Good: Solving Problems with AI"

Begin the video, stopping at the ***suggested*** time marks for questions, or use the questions after the video for discussion. Possible responses are included.

Big Question: What AI is Old? What AI is new?

(0:00-0.54)

1. Do you use facial recognition? If yes, with what device?
    a. *Student answers will vary. Typical facial recognition occurs when opening a phone or tablet, when using filters on social media apps, and in airports through security cameras.*

2. When you are using facial recognition, what do you think is happening?
    a. *Student answers will vary.*

3. Have you heard of people being able to create their chatbot?
    a. *Student answers will vary.*

4. What kind of AI do you think is used by a self-driving taxi?
    a. *Student answers will vary.*

5. Do you think a self-driving car is a good idea? Why or why not?
    a. Student answers will vary. Allow students time to discuss the pros and cons.

Big Question: How can AI help us learn more about our world?

(0:54-end)

5. Is using AI to learn more about our oceans a good use of AI? Why or why not?
    a. *Student answers will vary.*

6. Chicken was able to understand the dolphin in the video. How is this helpful for the dolphin?

a. *The dolphin could show Chicken where another dolphin was stuck and injured. This allowed Chicken to help the other dolphin that was trapped/stuck.*

Video 3: "AI in Action: Using AI Tools Responsibly"

Begin the video, stopping at the ***suggested*** time marks for questions, or use the questions after the video for discussion. Possible responses are included.

Big Question: How are AI and Generative AI different?
(0.00-0.48*)*

1. What was Chicken watching at the start of the video?
   a. *A video of a trick shot in basketball.*

2. What type of AI is used in the car's GPS or mapping system?
   a. *Predictive AI is used in a car's GPS.*

3. Why wouldn't this type of AI be preferred for help with making a "trick shot?"
   a. *A car's GPS is programmed to help the car get through traffic and find a shortened route. Its AI model is not designed to help with a trick shot in basketball.*

Big Question: What is generative AI?
(0.48-1:45)

4. Have you heard of the term chatbot before? Have you used a chatbot?
   a. *Student answers will vary.*

5. Why wasn't it enough that the chatbot helped Chicken get the basketball in the basket?
   a. *The chatbot only got the ball in the basket, but it did not do a "trick shot."*

6. Why does generative AI only do what you tell it to do?
    a. *The chatbot is programmed and will follow specific instructions. It is not a human.*

7. What does the speaker mean when they say, “Review what the AI tells you and make it your own?”
    a. *They are reminding us that AI isn’t human, and we need to be mindful of the information it provides us. We need to make sure it is accurate and safe.*

8. Why must the instructions to generative AI be detailed and specific?
    a. *Since AI is not human, we need to give it detailed and specific instructions or else it will do exactly as it is told.*

Big Question: How do we use Generative AI responsibly?
(1:45-2:30)

9. Did the chatbot give Chicken the correct instructions for making a trick shot? Why or why not?
    a. *The chatbot did not provide correct instructions for making a trick shot because Chicken had to jump in and complete the shot.*

10. What did Chicken have to do to complete the trick shot?
    a. *The chicken had to interfere and complete the trick shot.*

11. What lesson can we learn from Chicken’s interaction with the chatbot for his trick shot creation?
    a. *The lesson from Chicken’s interaction with the chatbot is that we need to be mindful and safe of the information we receive from any type of AI. We need to make it “our own” to use AI responsibly.*

Video 4: “AI in Action: Using AI Thoughtfully”

Begin the video, stopping at the ***suggested*** time marks for questions, or use the questions after the video for discussion. Possible responses are included.

Big Question: Why should I be careful when encountering information online? (0:00-1:21)

1. What are Agent and Chicken looking for ideas for at the beginning of the video?
   a. Agent and Chicken are looking for ideas to build a treehouse.

2. Why does the narrator warn Agent and Chicken about the first treehouse image they see?
   a. The narrator warns them because the image might be AI-generated, and it can be hard to tell if those pictures are fake.

3. What are some of the "weird" or "impossible" features of the AI-generated treehouse that Chicken explores?
   a. Some weird features include a door that leads to thin air, impossible-looking columns, stairs where Chicken reappears below another stairway, and Chicken walking upside-down on the bottom of a balcony.

Big Question: How can I make sure I am using AI thoughtfully? (1:22-2:51)

4. Why is it important to cross-check information, even if it comes from AI?
   a. It's important because even though AI can be very accurate, you always have to verify information with other reliable sources to ensure it's correct and safe.

5. How does AI help Agent and Chicken after they are disappointed by the fake image?
   a. AI helps them by providing detailed instructions on how to build a safe treehouse, materials needed, and safety ideas like adding a safety net.

6. Who are the "Building Birds" and why does the narrator trust them?
   a. The Building Birds are expert builders who create cool treehouses that are chicken-certified for safety. The narrator has been following them for years, making them a reliable source.

7. How do Agent and Chicken use both the AI information and the "Building Birds" video to construct their treehouse?
   a. They use AI for initial ideas and instructions, then use the Building Birds video to verify and improve the design, like using better steps instead of a ladder and adding a guardrail.

8. After building their treehouse, how do Agent and Chicken use the initial AI image again?
   a. They use the AI-generated image for inspiration to decorate their real, safe treehouse, making it look extra-fun while keeping it functional and secure.

Conversation Cards

Suggested Use: To ease the conversation around artificial intelligence, print these conversation cards and cut them out. You may want to print on cardstock paper for extra durability. Then, your child(ren) will have the question/prompt in front of them as needed for reference during discussion time(s).

Video 1: AI 101, Building the Basics	Video 1: AI 101, Building the Basics
Is finding information a lot like fishing? Why or why not?	How can artificial intelligence help us?
Video 1: AI 101, Building the Basics	**Video 1: AI 101, Building the Basics**
What is the first step for an AI model to be trained? Who does this training?	Let us think about Chicken training with huge amounts of information on “lots of different things,” Why is this important?
Video 1: AI 101, Building the Basics	**Video 1: AI 101, Building the Basics**
What happens after Chicken is done looking at information?	How does the AI model find patterns?

Video 1: AI 101, Building the Basics	Video 1: AI 101, Building the Basics
Let us think about one of the examples that Chicken gave us: why would books about tigers mention cats, but websites about cats rarely mention cars?	Why might an AI tool predict that whales live in lakes?
Video 1: AI 101, Building the Basics	**Video 2: AI for Good, Solving Problems with AI**
Do you think AI is always correct? Can you think of some ways we can check if AI is correct?	Do you use facial recognition? If yes, with what device?
Video 2: AI for Good, Solving Problems with AI	**Video 2: AI for Good, Solving Problems with AI**
When you are using facial recognition, what do you think is happening?	Have you heard of people being able to create their own chatbot?

Video 2: AI for Good, Solving Problems with A	Video 2: AI for Good, Solving Problems with AI
What kind of AI do you think is used by a self-driving taxi?	Is a self-driving car a good idea? Why or why not?
Video 2: AI for Good, Solving Problems with AI	**Video 2: AI for Good, Solving Problems with AI**
Do you think using AI to learn more about our oceans is an effective use of AI? Why or why not?	Chicken was able to understand the dolphin in the video. How is this helpful for the dolphin?
Video 3: AI in Action: Using AI Responsibly	**Video 3: AI in Action: Using AI Responsibly**
What was Chicken watching at the start of the video?	What type of AI is used in the car's GPS or mapping system?

Video 3: AI in Action: Using AI Responsibly	Video 3: AI in Action: Using AI Responsibly
Why wouldn't this type of AI be preferred to help make a "trick shot?	Have you heard of the term chatbot before? Have you used a chatbot?

Video 3: AI in Action: Using AI Responsibly	Video 3: AI in Action: Using AI Responsibly
Why wasn't it enough that the chatbot helped Chicken get the basketball in the basket?	Why does generative AI only do what you tell it to do?

Video 3: AI in Action: Using AI Responsibly	Video 3: AI in Action: Using AI Responsibly
What does the speaker mean when they say, "Review what the AI tells you and make it your own?"	Why must the instructions to generative AI be detailed and specific?

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Video 3: AI in Action: Using AI Responsibly	**Video 3: AI in Action: Using AI Responsibly**
Did the chatbot give Chicken the correct instructions for making a trick shot? Why or why not?	What did Chicken have to do to complete the trick shot?
Video 4: Using AI Thoughtfully	**Video 4: Using AI Thoughtfully**
What are Agent and Chicken looking for at the beginning of the video?	What made the AI-generated treehouse look "weird" or impossible?
Video 4: Using AI Thoughtfully	**Video 4: Using AI Thoughtfully**
Why is it important to cross-check information from AI with other sources?	Who are the Building Birds and why are they trustworthy?

Video 4: Using AI Thoughtfully	Video 4: Using AI Thoughtfully
How did Agent and Chicken use both AI and the Building Birds video to build their treehouse?	What's the difference between using AI for inspiration versus using it as your only source?
Video 4: Using AI Thoughtfully	**Video 4: Using AI Thoughtfully**
Can you always tell if an image is AI-generated just by looking at it?	What are some reliable sources you could use to check information from AI?
Video 4: Using AI Thoughtfully	**Video 4: Using AI Thoughtfully**
How did Agent and Chicken turn the "too good to be true" AI image into something useful?	If you see an amazing image or information online, what steps should you take before believing it or sharing it with others?

Activities

The activities are designed to reinforce the big ideas of the video lessons, as well

as the new vocabulary words

Plugged Activities (These activities require a device and are free on Minecraft Education)

Reed Smart: AI Detective

In this Minecraft Education **activity**, students will Investigate cases of AI misuse alongside Detective Reed Smart in this mystery from Minecraft Education!

- As you follow the clues, you'll analyze deepfakes, learn how to spot AI-generated content, and build information literacy skills that will help you get wise and stay cautious of online information. Ready to crack the case?

Hour of Code-Generation AI

In this Minecraft Education **activity**, students will continue to further their understanding of artificial intelligence and how it shapes our world.

- Students will continue to recognize the 6 principles that guide responsible AI development and use.

Additional Resources for Families

Minecraft Education Parent Guide

This guide is designed to assist parents who are supporting learners of all ages using Minecraft Education.