Field Agent Family Guide



What is Field Agent?

Field Agent is a single-player Minecraft Education experience for ages 8-12. In a simulated AI-literacy experience, your learner works with Farmer Fred to train an AI agent through a series of farm-themed challenges. As they provide examples, observe mistakes, and correct errors, your learner discovers how missing or incomplete data can lead to poor results. Through this process, they learn that AI depends on quality data, clear instructions, and human oversight to produce useful results. The experience encourages critical thinking and builds a foundation for understanding the AI technologies they will encounter in their lives.

How to use this guide

- Use this guide to understand what happens in the Field Agent game and continue the conversation at home.
- You do not need to be a Minecraft or AI expert! Ask your learner what they notice and encourage them to explain their thinking.
- Important Fact: **Field Agent is a simulated AI-literacy experience. No artificial intelligence or machine-learning model is used during gameplay.** The Agent follows programmed game rules that represent selected ideas about data, patterns, testing, and human review. The simulation simplifies how real AI systems are developed and used so students can focus on these core ideas in an age-appropriate way.

Key Vocabulary words

Use these words when talking with your learner about what they noticed, tried, and discovered. These concepts are central to the game!

Artificial Intelligence (AI) Technology that uses data and computational methods to identify patterns and produce outputs.	**Data** Information, such as words, numbers, images, measurements, or examples.	**Debug** Find and fix a problem in a computer program or system.	**Input** Information or instructions supplied to a system.
Output A result produced by a system.	**Predict** Produce an estimate based on patterns in data.	**Train** Develop an AI model using data and examples so it can identify patterns.	**Test** Check how consistently, accurately, safely, and fairly a system performs in different situations.

The Three Farm Activities

Use this overview to follow along with what your learner will do in each activity. Let them choose the order!

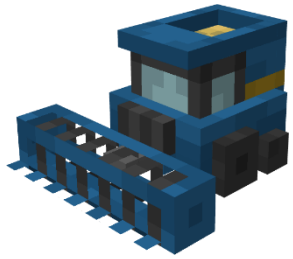
1. Barn Raising	2. Fence Building	3. Crop Harvesting
Show Agent which gate size works for chickens, sheep, and cows. The barn raising activity is at the red entrance.	Use examples to teach Agent how high different animals can jump. The fence building activity is at the blue entrance.	Train Agent to recognize when wheat is ready, then check its work. The crop harvesting activity is at the yellow entrance.

Make it a learning conversation

Bring the learning to life by talking together during or after gameplay. Let your learner lead the gameplay, explain what they notice, and share how they helped Agent learn and improve.

Try asking:

- What examples helped Agent learn what to do?
- What happened when Agent did not have the information it needed?
- How did you know whether Agent got it right?
- What did you change to help Agent do better?
- Why do the quality and quantity of data matter?
- Why do people need to guide AI and check AI outputs?



Ideas to reinforce through conversation:

- **The information an AI receives matters**. The data, examples, and information provided to an AI system can affect what it learns and the outputs it produces.
- **Missing information can affect results.** Missing, unclear, or incomplete information can lead to results that do not work as expected.
- **AI outputs need human review.** People need to check results to see whether they are correct and work as expected.
- **People can test and improve AI systems.** Better examples, testing, and careful review can help improve how a system performs.

Short on time? Have your learner complete the opening and one farm activity, then talk together about what happened.

Want to keep playing? Visit the Code Yard! Navigate the mazes, play in the area, or head back to the center for coding activities.

FAMILY CHALLENGE

What would you teach an AI system to do? Pick an everyday task, like emptying the dishwasher or sorting waste and recycling it into the correct bins. Talk about what information or examples the system would need, what mistakes might happen, and how you could check the results and make changes to improve them.

