

The AI Adventure Book
Growing Smart, Kind, and Creative with AI

TEACHER'S GUIDE



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A Guide for Teachers

The AI Adventure Book: Growing Smart, Kind and Creative with AI

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Introduction

The AI Adventure Book: Growing Smart, Kind, and Creative with AI offers children a positive, practical, and values-based introduction to artificial intelligence — one of the most important technologies shaping their future. This Teacher's Guide provides educators with meaningful, easy-to-use lesson plans that bring the book's themes to life in classrooms and group settings.

The lessons included here help students explore what AI is, how it works, and how to use it responsibly. They also emphasize skills that support academic growth and character development; including critical thinking, creativity, safety awareness, honesty, kindness, and collaborative problem solving. Like the book itself, the lessons are written for children ages 7–12 and can be adapted for younger or older learners based on classroom needs.

Each lesson aligns naturally with multiple content areas such as language arts, digital literacy, media literacy, science, technology, engineering, social–emotional learning, and character education. They are designed to invite conversation, curiosity, and hands-on exploration. Teachers may use the lessons in sequence or choose individual activities that complement their curriculum.

Our hope is that *The AI Adventure Book* and its accompanying teaching resources encourage students to engage with AI as thoughtful, empowered, and kind young learners. Through reading, discussion, and the activities that follow, students will better understand how AI tools can support their learning and creativity while recognizing the enduring importance of human values, judgment, and imagination.

A Note from the Publisher

We offer our Teacher's Guides free of charge and welcome you to enjoy them, share them, and use them with your students. We kindly ask that you help us respect copyright laws by not photocopying or distributing pages of the book itself. If you would like classroom sets or bulk copies of The AI Adventure Book, please visit www.wateringcanpress.com for ordering information and quantity discounts, including customized versions for educational programs and organizations.

Thank you for helping children grow into safe, smart, ethical, and confident users of technology, and for supporting their love of learning.



SUBJECTS: Language Arts, Digital Literacy, Media Literacy
TITLE: **Become an AI Detective: Sorting Facts, Opinions & Fakes**
GRADE LEVEL: 3–6

OBJECTIVE: Students will learn that AI can make mistakes, how to double-check information, and how to distinguish facts from opinions. Students will also practice identifying fake or misleading headlines and recognize why careful thinking is essential when using technology.

MATERIALS: *The AI Adventure Book*, chart paper, markers, teacher-prepared sample headlines, pencils.

ACTIVITY:

Part 1: Introducing AI Mistakes & Bias

1. Read pp. 16–17 in *The AI Adventure Book* (“AI Doesn’t Always Get It Right; Be an AI Detective”)

2. Discuss: Ask students,

“What surprised you about the idea that AI can be wrong?”

“Have you ever seen technology get confused?”

Encourage multiple answers to normalize the idea that AI is powerful but imperfect.

3. Create a two-column chart titled:

“When AI Might Be Wrong”

“What a Good Detective Does”

Teacher Guidance: Support students by offering examples drawn from the book or real life:

Examples for Column 1:

“AI might misunderstand the question.”

“AI may give only one type of picture (bias).”

“AI might guess instead of knowing.”

Examples for Column 2:

“Check two other sources.”

“Ask a grown-up.”

“Search a book or trusted site.”

“Ask AI for proof or two sources.”

Discussion Prompts:

“Why isn’t it enough to hear something once?”

“Why does checking multiple sources make us smarter?”

“What does a detective do differently from someone who just believes the first answer they hear?”

Part 2: Fact vs. Opinion Practice

4. Read the Truth Detective Game (p. 16).

5. Provide students with additional statements to categorize.

Teacher Examples:

“Sharks live in oceans.” (fact)

“Sharks are scary animals.” (opinion)

“Chocolate melts in heat.” (fact)

“Chocolate ice cream tastes better than vanilla.” (opinion)



Become an AI Detective: Sorting Facts, Opinions & Fakes *CONTINUED*

6. Students compare their choices in pairs, then share with the class.

Ask:

“How did you know this was a fact?”

“Could two people disagree about this?”

“Why might AI sometimes mix facts and opinions?”

Part 3: Fake or Real Headlines?

7. Explain: “AI can create images or headlines that look real even when they’re not. Detectives slow down and check things.”

8. Provide three headlines (one realistic, one exaggerated, one impossible). Example set:

Realistic: “The tallest mountain on Earth is Mount Everest.”

Exaggerated: “A robot won a footrace against a cheetah.”

Impossible: “CATS CAN TEXT THEIR OWNERS.”

9. Students vote CHECK IT or SAFE TO BELIEVE.

10. Discuss clues:

“What made this headline suspicious?”

“What information would you check first?”

“Where could you go to confirm this?”

Part 4: Clear Questions Get Better Answers

11. Explain: “Detectives don’t just check information; they ask better questions. Clear questions help AI give clear answers.”

12. Students practice rewriting vague questions. Example:

Original: “Tell me about dogs.”

Improved: “Give me two facts about golden retrievers.”

Improved: “What does a puppy need to stay healthy?”

Improved: “Name three calm, kid-friendly dog breeds.”

13. Students share examples and reflect on why their new questions work better.

STANDARDS:

- Language Arts: Distinguishes fact/opinion; evaluates informational sources.
- Technology: Uses digital tools responsibly and with critical thinking.
- Civics/Media Literacy: Identifies misinformation; evaluates claims and evidence.



SUBJECTS: Character Education, Social–Emotional Learning, Language Arts

TITLE: **The THINK Test: Using AI with Kindness & Integrity**

GRADE LEVEL: 3–6

OBJECTIVE: Students will practice respectful, honest, and kind choices when using AI. They will evaluate AI-generated content using the THINK Test and revise content to make it kinder and more appropriate.

MATERIALS: *The AI Adventure Book*, chart paper, markers, sample AI-created jokes/images, pencils

ACTIVITY:

Part 1: Exploring Honesty With AI

1. Read “Be Honest With AI” (p. 21) of *The AI Adventure Book* aloud and discuss the four guidelines: ask, give credit, add your own ideas, respect others’ work.
2. Ask students questions such as:
 - “Why is it important to tell your teacher when AI helped you?”
 - “Why shouldn’t we take credit for ideas we didn’t create?”
3. Create a class chart:
 - Respectful AI Use
 - Not Respectful AI UseExamples to offer:
 - Respectful: “AI gave me ideas; I chose my favorite and wrote my own story.”
 - Not respectful: “I copied AI’s answer and turned it in as homework.”

Part 2: The THINK Test

4. Read p. 22 of *The AI Adventure Book* (“Be Kind With AI”).
5. Write each letter of THINK on the board (True, Helpful, Inspiring, Nice, Kind).
6. Pose discussion questions:
 - “Why do online choices need kindness just as much as real-life choices?”
 - “How might someone feel if you shared an unkind AI-generated message about them?”
7. Give students sample AI messages or images to evaluate. Examples:
 - A silly picture of a student with exaggerated ears.
 - A joke like: “You work slower than a turtle!”
 - A compliment that is generic: “You are good.”
8. Students use THINK to determine whether to Share It, Revise It, or Do Not Share.

Part 3: Rewrite & Improve Messages

9. Groups choose one example that fails the THINK test and rewrite it more kindly.
 - Example:
 - AI: “Your drawing is way better than everyone else’s.”
 - Student fix: “Your drawing is really creative — I love the colors!”
10. Discuss what changed and why kindness matters.



The THINK Test: Using AI with Kindness & Integrity *CONTINUED*

Part 4: Kindness Creations

11. Students choose one Try-It-With-AI activity (p. 23):

 Ask AI to help write a thank-you message

 Ask AI for an idea for a kind action

 Ask AI to help invent a story where kindness solves a problem

12. Students add their own words, ideas, or illustrations and then share with the class.

STANDARDS:

- Character Education: Demonstrates fairness, empathy, honesty, and positive relationships.
- Language Arts: Writes for purpose and audience; revises for tone.
- Digital Citizenship: Uses technology ethically and respectfully.



SUBJECTS: Science, Technology, STEAM, SEL

TITLE: Human Superpowers vs. AI Powers: Understanding Strengths & Limitations

GRADE LEVEL: 3–6

OBJECTIVE: Students will compare AI abilities to human strengths, understand what AI cannot do, and identify ways humans and AI can work together. They will develop self-awareness of their own “human superpowers.”

MATERIALS: *The AI Adventure Book*, chart paper, markers, prepared task cards (e.g., “give a hug,” “solve a math problem”), sticky notes.

ACTIVITY:

Part 1: What AI Can and Cannot Do

1. Read pp. 6–11 in *The AI Adventure Book* (“What Is AI?”, “Think of AI As...,” and “AI CANNOT...”)

2. Ask:

“What things can AI do really well?”

“What things can only humans do?”

“Why do we need both?”

3. Create a Venn diagram with three sections:

AI Only

Human Only

Better Together

Teacher Example Entries:

AI Only: “Analyze huge data fast,” “Make recommendations,” “Recognize patterns.”

Human Only: “Feel empathy,” “Make value-based decisions,” “Imagine freely,” “Hug someone.”

Better Together: “Solve big problems,” “Create inventions,” “Learn something new,” “Protect the environment.”

Part 2: Sorting Task Cards

4. Provide groups with task cards. Students place each in the appropriate area of the Venn diagram.

Teacher-created examples:

“Write a heartfelt apology.” (Human Only)

“Translate a paragraph into another language.” (AI Only -if you don’t speak the language)

“Invent a machine to clean oceans.” (Better Together)

5. Discuss choices as a class.

Questions:

“Why did you put this card there?”

“Could humans and AI do this better together?”

“How does knowing AI’s limits keep us safe and smart?”

Part 3: Human Superpowers Reflection

6. Read the page where students choose a human superpower (p. 11) and discuss:

“Which human qualities do you want to grow?”

“How could AI help you practice them while still being YOU?”



Human Superpowers vs. AI Powers: Understanding Strengths & Limitations CONTINUED

7. Students complete the writing prompt on p. 11 and add their superpower to a class poster titled "Superpowers AI Can't Replace"

Part 4: How People Use AI in Their Jobs

8. Read the examples on pp. 12–13 (doctor, firefighter, teacher, athlete, 4th grader, game designer).

9. Ask students what patterns they notice.

Teacher prompts:

"What do these jobs use AI for?"

"What are the parts of their jobs that AI cannot do?"

"Why is teamwork between humans and AI important in real jobs?"

STANDARDS:

- Science/Technology: Understands uses and limitations of AI; recognizes human-technology systems.
- SEL: Identifies personal strengths and how to apply them.
- STEAM: Explores collaborative problem-solving.



SUBJECTS: Science, Technology, Engineering, Critical Thinking

TITLE: How AI Works — Teaching Machines to Learn Like Detectives

GRADE LEVEL: 3–6

OBJECTIVE: Students will explore how AI tools learn by identifying patterns in data. They will practice simulating the training of an AI model, understand why AI sometimes makes mistakes, and recognize the importance of human guidance in improving AI systems.

MATERIALS: *The AI Adventure Book*, Sets of picture or word cards in two categories (e.g., animals vs. vehicles; fruits vs. desserts; circles vs. triangles) Chart paper and markers, Sticky notes, Optional: blank index cards for students to create new examples, Three simple workstations

ACTIVITY:

Part 1: AI as a Pattern Detective

1. Explain to students that AI tools do not think or feel like humans. Instead, they learn by looking at many examples and trying to find patterns. Share that this makes AI a “pattern detective.”
2. Ask students:
 - “When have you seen technology help you with something?”
 - “When have you seen technology get confused?”Gather a few responses to build curiosity.
3. Create an anchor chart titled How AI Learns: Three Big Steps and guide students to fill in the steps:
 - Step 1: Training — AI looks at many examples.
 - Step 2: Guessing — AI uses patterns to make predictions.
 - Step 3: Improving — AI uses feedback to get better over time

Part 2: Simulation: Train Your Classroom AI Model

4. Divide students into small groups and give each group a stack of mixed cards from two categories.
5. Tell students: “You are the training data. Your job is to sort these cards so our classroom AI model can learn the difference between the two categories.”
6. Groups sort the cards into two piles. Once complete, label the category names on the board.
7. Hold up several cards and ask students what patterns they used. Encourage observations such as:
 - Number of legs or wheels
 - Shape
 - What the object does or how it moves
8. Explain that this is exactly how AI systems begin learning: by recognizing patterns from the examples they are given.

Part 3: Testing the Model: Making Predictions

9. Show students several new cards the AI “model” has not seen before.
10. For each card, ask students to predict which category it belongs to based on the patterns they learned during training.
11. When mistakes occur, discuss why:
 - “What made this confusing?”
 - “What didn’t we teach the model yet?”Guide students to understand that mistakes mean the model needs more or better examples.



How AI Works — Teaching Machines to Learn Like Detective- *CONTINUED*

Part 4: Improving the Model with Feedback

12. Create a Fix-It Feedback area using sticky notes.
13. Students write new examples or clarifying notes that would help the AI model learn the pattern more accurately and place them under the appropriate category.
14. Explain that this is how real AI tools improve: humans notice mistakes and provide better examples or instructions.

Part 5: Optional Learning Stations -- Set up three simple stations for deeper exploration:

Station A: Classification Challenge:

Students create a new set of 10 cards in two categories and sort them to “train” a classmate.

Station B: Prediction Station:

Students draw or write one new item and ask a partner to classify it based on learned patterns.

Station C: Improvement Station:

Students redesign confusing or borderline examples to make patterns clearer for the model.

WRAP-UP DISCUSSION

Ask students:

- “What did you learn about how AI works?”
- “Why can AI be helpful?”
- “Why does AI sometimes make mistakes?”
- “How do humans help AI improve?”

Reinforce that AI tools become better learners when humans provide thoughtful examples, feedback, and guidance.

STANDARDS

Science & Engineering Practices:

- Identifies patterns
- Constructs explanations
- Uses evidence to support reasoning
- Understands systems and system models

Technology:

- Understands basic ideas about machine learning
- Recognizes how humans guide and improve technology

Critical Thinking:

- Analyzes errors
- Practices feedback and refinement
- Evaluates information and patterns



SUBJECTS: STEAM, Creativity, Language Arts, Entrepreneurship

TITLE: **Dream Big! Designing Future Inventions with AI as a Creative Partner**

GRADE LEVEL: 3–6

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OBJECTIVE: Students will identify a real-world problem, imagine an invention to solve it, and use AI as a brainstorming partner while maintaining ownership of their ideas.

MATERIALS: *The AI Adventure Book*, poster board, art supplies, pencils, optional access to an AI tool.

ACTIVITY

Part 1: Exploring Dreams & Future Possibilities

1. Read pp. 39–40 of *The AI Adventure Book* (“Dream Big and Imagine What’s Possible”) together.
2. Ask students:
 - “What is something you wish were easier or better in the world?”
 - “What problem do you hope people can solve in the future?”
3. Encourage them to think of everyday problems, community problems, or global problems.

Part 2: Start Your Own Invention

4. Students complete the invention sentence frame on p. 41 of *The AI Adventure Book*.
5. Guide them through sketching or describing their invention.
 - Ask: “What will it look like?” “Who will it help?” “What features will it have?”

Part 3: AI as a Brainstorming Partner

6. Explain: “Inventors often get stuck. AI can help us brainstorm ideas, but we decide what to keep.”
7. Students ask AI for:
 - 3 possible improvements,
 - 1 fun or unexpected “twist,”
 - 1 possible problem their invention might face.
8. Students highlight which ideas they will keep and which they will change or reject, reinforcing human leadership.
9. Ask: “Which AI ideas made your invention better?” “Which ideas didn’t fit your vision, and why?”

Part 4: Create & Present a Prototype Poster

10. Students create posters with:
 - The problem
 - Their invention
 - How AI helped
 - Their own original additions
11. Students present to the class or in small groups.

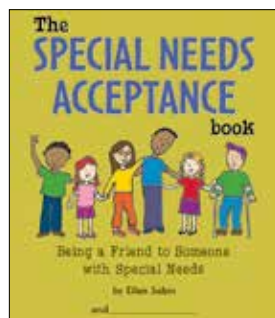
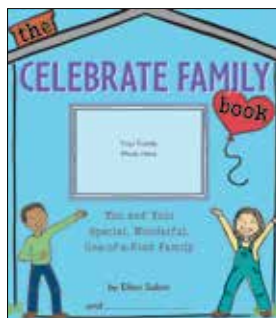
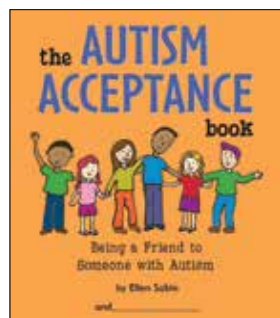
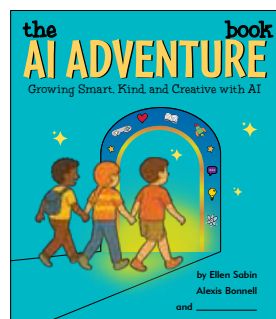
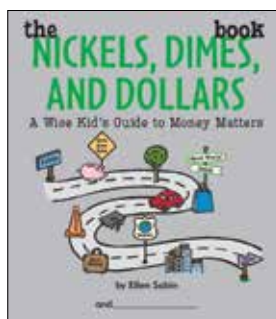
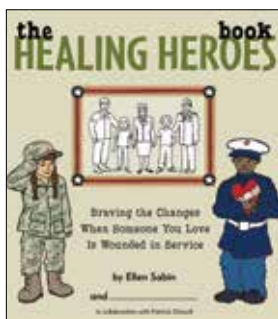
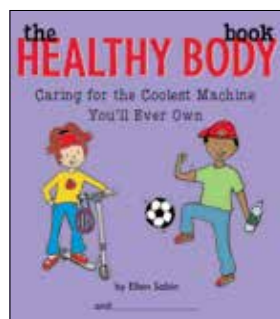
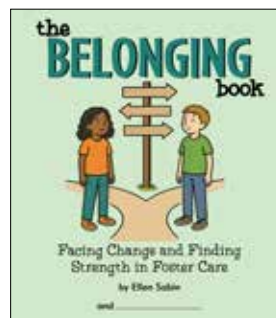
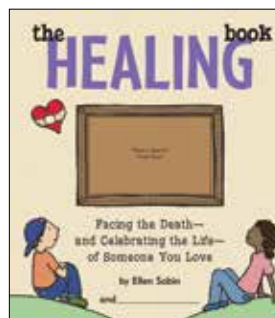
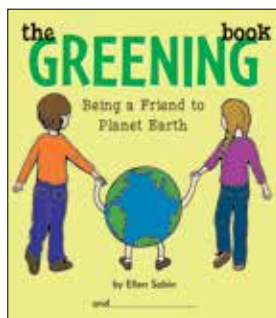
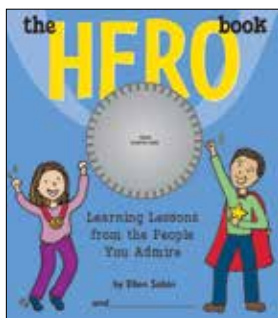
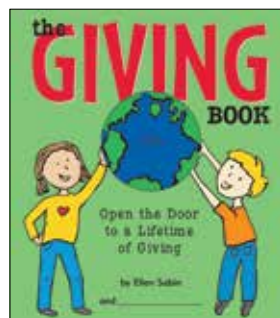
STANDARDS:

- STEAM: Applies design thinking; explores engineering creativity.
- Language Arts: Writes functional descriptions; presents ideas clearly.
- Entrepreneurial Skills: Identifies problems, proposes solutions, iterates ideas.



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