

Understand the Machine

A TEACHER'S STARTER KIT

AI in the Classroom

Ready-to-run lesson plans, copy-and-paste policy language, assessment ideas, and a parent guide for bringing AI into your classroom thoughtfully — not banning it, not blindly adopting it.

Free AI literacy for everyone — no tech background needed

understandthemachine.org

AI tools like ChatGPT are already in your students' hands. Banning them is hard to enforce and can backfire — students will use AI in their careers. This kit helps you integrate AI so it *supports* learning instead of replacing it: set a clear policy, run four tested lessons, and assess work that actually reflects understanding.

THE KIT IN 60 SECONDS

Used well, AI can explain tough concepts, give feedback, and save you hours. Used carelessly, it short-circuits real learning. The dividing line for students is one question: *Are you using AI to understand the material, or to avoid understanding it?*

What's Inside

1. **Set your class AI policy** — three ready-to-copy levels
2. **Four ready-to-run lesson plans** — objective, steps, discussion, timing
3. **Assessment for the AI era** — keep it meaningful, plus a note on detectors
4. **A school-wide policy template** — the elements a good policy needs
5. **A student handout** — the "before you submit" checklist and how to cite AI
6. **A parent guide** — talking points and home boundaries

Part 1: Set Your Class AI Policy

The single most useful thing you can do is tell students exactly what's allowed. Ambiguity causes most problems. Pick a level below, paste it into your syllabus, and go over it on day one and before major assignments.

Level 1

No AI

"All work submitted in this class must be entirely your own. Use of AI writing tools, chatbots, or code generators is not permitted on any assignment. Using these tools will be treated as an academic-integrity violation."

Level 2

AI with disclosure

"You may use AI tools for brainstorming, research, and editing. You may not use AI to generate finished text, solutions, or creative work that you submit as your own. When you use AI, include a brief note describing how you used it. Failure to disclose AI use is an academic-integrity violation."

Level 3

AI integrated

"AI tools are a resource you're encouraged to use, just like textbooks or tutoring. However, you must be able to explain and defend all work you submit. Assignments include a reflection where you describe your process, including any AI use. Your grade reflects your understanding, not just your output."

A good policy names...

- Which AI tools students may use (if any)
- Which assignments allow AI assistance and which don't
- Acceptable use (brainstorming, grammar, research) vs. unacceptable (finished work)
- How students should disclose AI use
- What happens if the policy is violated

Part 2: Four Ready-to-Run Lessons

Each lesson stands alone. Adapt the grade band and timing to your class. All four turn AI into a teaching tool rather than something to police.

Lesson 1

Grades 6–12

45 min

History · Science · Current events

The AI Fact-Check

Objective: Students learn that AI can sound confident and still be wrong, and practice verifying claims with reliable sources.

You'll need: One device per small group; access to a chatbot; textbooks or approved reference sites.

Steps:

1. (5 min) Ask an AI a factual question from your unit and read the answer aloud.
2. (15 min) In groups, students ask the AI three more questions, then fact-check each answer against two reliable sources.
3. (15 min) Groups mark each answer correct, partly correct, or wrong — and cite the source that settled it.
4. (10 min) Share findings. Where did the AI err? How would you have known without checking?

Discuss: Why does a wrong answer still *sound* right? What's your rule for trusting AI now?

Extension: Students write a one-paragraph "correction notice" for the worst error they found.

Prompt Engineering Workshop

Objective: Students see how clearer instructions produce better results — a communication skill that transfers well beyond AI.

You'll need: Devices; one shared task (e.g., "Explain the water cycle").

Steps:

1. (5 min) Everyone gives the AI the same vague prompt and notes the result.
2. (15 min) Students rewrite the prompt three ways — adding audience, format, and detail — and compare answers.
3. (10 min) Each student picks the prompt that worked best and explains why.
4. (10 min) Build a class list of "what makes a good prompt."

Discuss: How is writing a good prompt like giving good instructions to a person?

Extension: Apply the class rules to a prompt for an upcoming assignment's brainstorming step.

The AI Debate Partner

Objective: Students strengthen an argument by engaging real counterarguments instead of repeating their own position.

You'll need: Devices; a debatable question tied to your unit.

Steps:

1. (10 min) Students write their position and top reasons.
2. (15 min) They ask the AI to argue the opposing side as strongly as possible.
3. (15 min) Students write a response that answers the AI's strongest points.
4. (10 min) Volunteers share how their thinking changed.

Discuss: Did the AI raise a point you hadn't considered? Did any of its arguments fall apart under scrutiny?

Extension: Students list one point on which both sides actually agree.

Compare & Improve

Objective: Students learn what AI writing lacks — voice, nuance, personal experience — by improving a machine-written draft.

You'll need: A short piece of AI-generated writing on your topic (you can generate it in advance).

Steps:

1. (10 min) Students read the AI draft and mark its weak spots.
2. (20 min) They rewrite it — adding a real example, a stronger opening, and their own voice.
3. (10 min) Pairs swap and note what each other's revision improved.
4. (5 min) Class names what AI writing consistently misses.

Discuss: What can you bring to writing that an AI can't?

Extension: Keep a "process portfolio" — drafts, notes, and reflections — for the next assignment so learning shows, not just output.

AI Bias Investigation

Objective: Students discover that AI reflects the data it learned from, and practice spotting bias in its output.

You'll need: Devices; a shared worksheet to record answers.

Steps:

1. (10 min) Groups ask the AI the same question phrased two or three different ways (or about different groups of people) and record each answer.
2. (15 min) They compare answers: what changed? Whose perspective is centered or missing?
3. (10 min) Groups trace a likely cause — what kind of training data might explain the difference?
4. (10 min) Share out, then discuss what "fair" output would look like.

Discuss: If an AI is trained on the internet, whose voices does it hear most — and least? How could that affect its answers?

Extension: Students draft one guideline they'd give an AI company to reduce bias.

Part 3: Assessment for the AI Era

Take-home essays are harder to trust when every student has a chatbot. These approaches keep assessment meaningful:

- ☐ **In-class writing** — some work done without devices, so you see genuine ability.
- ☐ **Oral defenses** — students explain and answer questions about their work.
- ☐ **Personal-connection prompts** — require local context, class discussion, or lived experience.
- ☐ **Iterative drafts** — multiple drafts over time; a real process is hard to fake.
- ☐ **Reflection essays** — what confused you, what clicked, how your thinking changed. AI can't reflect on experiences it didn't have.

A note on AI-detection tools

As of 2026, detectors are **not reliable enough** to be the sole basis for an integrity charge. They produce false positives — and are especially unfair to English-language learners. If you suspect misuse, a conversation about the student's process, sources, and choices is more accurate and more fair than any detector.

Part 4: A School-Wide Policy Template

Districts need institution-wide policy, not just individual rules. A strong one includes:

- ☐ **A clear definition of covered tools** — chatbots, writing assistants, code and image generators, paraphrasers.
- ☐ **A spectrum of permitted use** — levels teachers choose per assignment, not a blanket ban or approval.
- ☐ **Student training** — teach what AI is and why responsible use matters before enforcing rules.
- ☐ **Faculty training** — professional development so teachers can decide when to allow AI.
- ☐ **A fair, proportional violations process** — a first, honest mistake differs from a deliberate pattern.
- ☐ **Annual review** — the technology changes fast; revisit the policy every year.

Part 5: Student Handout

Photocopy this page for students, or post it in your learning platform.

Before You Submit: A Checklist

- ☐ I understand the material well enough to explain it without AI.
- ☐ I checked my teacher's policy on AI for this assignment.
- ☐ The ideas and arguments are genuinely mine.
- ☐ I wrote the final text myself — AI didn't write it for me.
- ☐ I noted any AI tools I used and how I used them.
- ☐ I double-checked any facts the AI gave me.
- ☐ I could answer questions about my work in class, without the AI.

How to Cite AI

When AI use is allowed, be transparent about it:

- **APA:** OpenAI. (2026). *ChatGPT* (July 2 version) [Large language model]. <https://chatgpt.com>
- **MLA:** "Description of your prompt." *ChatGPT*, version, OpenAI, 2 Jul. 2026, chatgpt.com.
- **Chicago:** a footnote with your prompt, the tool and version, and the date.

Even when no formal citation is required, add a note: *"I used ChatGPT to brainstorm ideas and check grammar. All writing is my own."* Honesty builds trust.

When it usually helps vs. usually cheats

Usually fine

Brainstorming, having a concept explained, checking grammar, making practice questions, finding a research starting point.

Usually cheating

Having AI write the assignment, using it on tests when not allowed, skipping the attempt, hiding that you used it.

Unsure? Ask your teacher. A two-minute email beats an integrity violation.

Part 6: A Guide for Parents

Share this with families. If a child is in middle school or older, they've almost certainly met AI tools already.

Five conversations worth having

- **"Show me what you're using."** Understand their world; most kids love explaining something they know well.
- **"What does your teacher say about AI?"** Rules vary by class — a friend's teacher's rule isn't theirs.
- **"Can you explain this to me without the AI?"** If they can, it helped them learn. If they can't, it did the work for them.
- **"What if you relied on this for everything?"** Talk through the skills they'd miss and the test they couldn't use it on.
- **"Is the AI ever wrong?"** Yes — often. Spotting an error is a sign of strong thinking.

Reasonable boundaries at home

- ☐ Know and support the school's rules.
- ☐ Encourage the "try first" rule — attempt the work before asking AI.
- ☐ Keep AI use in shared spaces for younger kids.
- ☐ Watch for over-reliance — if no homework happens without AI, rebuild the basics.
- ☐ Model good behavior — talk openly about when you use AI and when you don't.

Privacy & Safety Basics

- ☐ **No personal information** — never type full name, address, school, or phone number into a chatbot.
- ☐ **Prefer school accounts** — they often add privacy protections personal accounts lack.
- ☐ **Assume conversations are stored** — treat anything typed as potentially seen by others.
- ☐ **Mind age limits** — most tools require users to be 13+; some 18+. Follow the terms.

The bottom line. We teach kids to evaluate websites and to use calculators without losing mental math. AI deserves the same approach — thoughtful integration, not blind adoption or

blanket rejection. It's not a problem to solve once; it's an ongoing conversation worth keeping up at school and at home.

Your First Two Weeks: A Rollout Plan

You don't have to change everything at once. This gradual plan lets you introduce AI without losing control of your classroom.

Days 1–3

Set the ground rules

- ☐ Choose your policy level (Part 1) and add it to your syllabus.
- ☐ Explain it to students on day one — and why it exists.
- ☐ Share the student handout (Part 5) so expectations are concrete.

Days 4–7

Teach with it once

- ☐ Run one lesson from Part 2 — the AI Fact-Check is the easiest start.
- ☐ Debrief: what surprised students about the AI's answers?
- ☐ Reinforce that AI is a tool to check, not a source to trust.

Days 8–14

Adjust assessment

- ☐ Add one AI-resistant element to your next assignment (in-class writing, reflection, or an oral defense).
- ☐ Send the parent guide (Part 6) home.
- ☐ Note what worked, and refine your policy for next term.

Quick Glossary for the Classroom

Chatbot / large language model (LLM)

An AI you converse with in plain language, like ChatGPT, Gemini, or Claude. It predicts likely text; it doesn't "understand."

Prompt

What a user types to instruct the AI. Clearer prompts produce better results.

Hallucination

When an AI states something false with confidence. The reason fact-checking is non-negotiable.

Training data

The examples an AI learned from. Its gaps and biases show up in the AI's answers.

AI detector

A tool claiming to spot AI-written text. Currently unreliable — don't use it as sole evidence of misconduct.

Process portfolio

A record of drafts, notes, and reflections that shows genuine learning, not just a final product.

Free resources & further reading

The lessons above are original to Understand the Machine and free to adapt with attribution. For more free, classroom-ready material, these organizations are worth exploring (check each provider's own license before reusing their materials):

- AI for Education — free GenAI literacy lessons for teachers, aiforeducation.io
- U.S. Department of Education — AI in education reports, tech.ed.gov
- ISTE — AI in education resources, iste.org
- Common Sense Media — AI ratings and family guidance, commonsensemedia.org
- MIT RAISE / Day of AI — K-12 AI curricula (verify license before reuse), dayofai.org

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