

AI Literacy for Ages 12-18

Working thoughtfully with AI to think, learn, and create

ESRA OBUT

Language • Culture • AI & Human Collaboration



What do we want young people to learn at this age?

Between the ages of 12 and 18, young people begin to use AI more independently for research, schoolwork, exam preparation, content creation, and decision-making. This guide is designed for parents and educators who want to teach them not only how to use the tool, but also how to decide when to use it, which tasks to delegate, and how to evaluate what it produces.

THIS GUIDE'S APPROACH

- Receiving a ready-made answer does not mean learning has taken place.
- AI can support the thinking process; it should not think in the young person's place.
- Young people should recognise why they need support and when that support is enough.
- A fluent answer is not the same as a verified and reliable answer.
- The final choice, interpretation, and responsibility should remain with the young person.

THE ADULT'S ROLE

The adult's role is not to provide the correct answer, but to help the young person set a goal, question the AI output, and make their thinking process visible.

USE THE SAME CYCLE FOR EVERY TASK

1

YOUNG PERSON FIRST

States what they know and sets a goal.

2

THEN THE TOOL

Provides support for a specific need.

3

BACK TO THE YOUNG PERSON

Checks, revises, and decides.

AI literacy is about more than writing prompts

Young people in this age group need to know that AI uses patterns to generate predictions, that it can make mistakes, and that its answers may be shaped by data, human choices, and commercial goals. This understanding helps them avoid seeing the system as either a magical mind or a completely neutral tool.

EXAMINE IT TOGETHER

Choose a search, video, or social media app the young person uses often. Discuss: “What is being ranked here?”, “What is the system predicting about me?”, and “Who benefits from this recommendation?”

DATA

01 The examples included - and the people left out - shape the result.

HUMAN CHOICES

02 People define the goals, labels, and rules behind the system.

COMMERCIAL GOALS

03 Content may be selected not only because it is useful, but because it keeps our attention.

A KEY DISTINCTION

What AI says and the data, assumptions, and goals behind its answer are not the same question.

What can be delegated, and what should remain theirs?

It is not realistic to expect young people either to reject AI completely or to hand every task over to it. A stronger approach is to separate the parts of a task and make clear where responsibility for thinking must remain with the young person.

AI CAN SUPPORT

- An introduction to a topic or concept
- Alternative ideas and examples
- Feedback on a draft
- Keywords for finding sources

THEY SHOULD RETAIN

- The learning goal and central idea
- Judging a source's reliability
- Developing their own interpretation and voice
- The final choice and responsibility

EXAMINE IT TOGETHER

Break an assignment into parts. For each part, ask: "Which skill would I not practise if AI did this?" and "Is speed or learning more important here?"

CHECK THE ANSWER TOGETHER

Separate the claims in the answer. Are sources provided? Do they really support the claims? Are dates, context, or opposing views missing? Check at least two independent, reliable sources. Ask the young person to explain their final judgement in one sentence.

Delegate a clearly defined support task, not the entire piece of work.

Learning to manage their own learning

Metacognitive learning means becoming aware not only of what one learns, but also of how one learns. The goal is for young people to assess their knowledge and its limits, choose an appropriate strategy, monitor whether they understand as they work, and change their approach when needed. Using AI can offer a valuable opportunity to make these skills visible.

PLAN

1

What is my goal? What do I know? Where am I struggling? Do I really need AI?

MONITOR

2

Is this support helping me understand? Am I accepting it passively? Does the answer fit my goal and the evidence?

CHANGE STRATEGY

3

If I do not understand, should I ask for another example, comparison, question, or source? Should I try without the tool for a while?

EVALUATE

4

Can I explain what I learned in my own words? What did I change? What will I do in the next task?

WHY DOES IT MATTER?

Without monitoring their own learning, young people may mistake an AI's fluent answer for learning. Metacognitive questions help them notice what they truly understand, where they need support, and when the tool begins to replace their thinking.

The goal is not for an adult to control every step, but for this inner conversation to become the young person's own habit.

Listing questions is not enough; model the thinking process

Metacognitive skills do not develop by memorising a checklist. They grow when the thinking process is made visible again and again. A parent or educator can first model their own evaluation aloud, then gradually transfer responsibility to the young person.

A THINK-ALoud EXAMPLE

THE ADULT MIGHT SAY

“This answer looks polished, but I am unsure about two claims. First I will separate the claims, then check a reliable source. Only one perspective is included, so I should also look for another explanation.”

GRADUALLY REDUCE SUPPORT

1

DO IT TOGETHER

Set a goal, examine the answer, and choose how to check it together.

2

SUPPORT WITH QUESTIONS

Instead of giving the solution, ask: “What is your next step?”

3

OBSERVE

Let the young person manage the process and step in only when needed.

4

LOOK BACK

Discuss which strategy worked and what they will change next time.

CAUTION

Constantly seeking adult approval can also limit independence. The goal is for the young person to develop their own criteria.

Metacognitive Learning Journal

A young person can complete this page before, during, and after using AI for an assignment, research task, or creative project. Short answers are enough; what matters is noticing the thinking process.

MY GOAL FOR THIS TASK

BEFORE: WHAT DO I KNOW, AND WHERE AM I STRUGGLING?

MY PLAN: WHAT SUPPORT WILL I ASK AI FOR, AND HOW?

DURING: WHAT DO I UNDERSTAND, AND WHAT IS STILL UNCLEAR?

AFTER: WHAT DID I CHECK, AND WHAT DID I CHANGE?

THE STRATEGY I WILL USE IN MY NEXT TASK

I ask myself: Did this support develop my thinking, or did it think in my place?

From Output to Decision: Checking and Responsibility

This activity teaches young people to separate an AI answer into claims, evidence, and missing context instead of accepting it as a single whole. Choose a short AI output about a topic they are researching.

HOW TO USE IT

Choose three important claims from the output. Complete the four steps below for each claim; the young person should write the final decision and their reason.

1

CLAIM

EVIDENCE / SOURCE

MISSING CONTEXT OR ANOTHER VIEW

MY DECISION AND REASON

2

CLAIM

EVIDENCE / SOURCE

MISSING CONTEXT OR ANOTHER VIEW

MY DECISION AND REASON

3

CLAIM

EVIDENCE / SOURCE

MISSING CONTEXT OR ANOTHER VIEW

MY DECISION AND REASON

☐ Accepted ☐ Revised ☐ Rejected - because responsibility for the decision is mine.

Privacy, bias, and responsibility

Young people need to understand AI not only as a personal working tool, but also as a system connected to which information becomes visible in society and how decisions are made. Safety rules, therefore, should not be separated from ethical discussion.

PRIVACY

Before sharing personal information, private conversations, location, school details, facial images, or voice recordings, consider how the data will be used.

BIAS

An output may stereotype some groups or make them invisible. Ask: “Who is represented, and who is missing?”

RESPONSIBILITY

Even when AI makes the suggestion, the user remains responsible for sharing it, using it, and considering who may be affected.

EXAMINE IT TOGETHER

Discuss not only whether an AI output is correct, but also whom it may affect: “Who could be harmed if this is shared?”, “Which perspective is missing?”, and “How would we justify this decision if we had to explain it?”

In the education and professions of the future, what matters is not only being able to use AI, but deciding what not to automate, which values to protect, and how to take responsibility for the consequences.

Where can you begin?

Use these resources not as ready-made answers for young people, but as tools for thinking together about how AI works, its ethical effects, and its social consequences.

DAY OF AI - MIT RAISE

dayofai.org

Free lessons for ages 11-18 exploring how AI works alongside ethics, bias, and safety.

EXPERIENCE AI

experience-ai.org

Resources for ages 11-14 teaching machine learning, data, and bias through practical classroom activities.

CODE.ORG - HOW AI WORKS

code.org/ai

Student-friendly content on large language models, training data, and the basic logic of algorithms.

AI4ALL - AI & ETHICS

ai-4-all.org

Content that encourages high-school students to examine ethical dilemmas and the consequences of different technology decisions.

NOTE

An adult or educator should check the programs' current age guidance, terms of use, and data policies before use.

The goal is for young people to see AI not as a replacement for their own thinking, but as a collaborator in the processes of thinking, learning, and creating.

AI can support the process; it should not learn, think, or create in the young person's place.