

A PRACTICAL GUIDE FOR TEACHERS

AI literacy in every classroom

Created by the Raspberry Pi Foundation

AI
literacy
for all



Explore the free Experience AI resources
experience-ai.org

Experience AI



Welcome

This guide is for you if...

- ✓ You're curious about artificial intelligence (AI) but don't know where to start
- ✓ You want to help your learners think critically about the technologies shaping their world
- ✓ You want practical ideas that fit into the curriculum you already teach
- ✓ You're looking for free, high-quality teaching resources

If that's you, you're in the right place.

You may not think of yourself as someone who teaches about AI, but if you're helping young people understand the world around them, you're already teaching the skills AI literacy is built on.

Whether you're discussing persuasive writing in English, evidence in science, creativity in art, ethical dilemmas in social studies, or historical change, you're helping learners question information, evaluate evidence, and think critically.

As AI tools become an increasingly important part of everyday life, those skills have never been more valuable.

This guide introduces AI literacy, explains why it matters across the curriculum, and shows how the Experience AI programme can help you bring these conversations into your classroom.



A classroom story

Sandra Theobald, Grade 8 classroom teacher, Canada

When Sandra piloted an Experience AI activity exploring AI and social media, she assumed her students would already understand many of the concepts. After all, they used social media regularly.

But as the activity began, Sandra saw students start to make connections between their online behaviour, the data they generate, and the content they are shown. Most importantly, her students left feeling empowered by what they'd learned. They felt more confident understanding how their engagement with social media influenced what they saw, and were keen to share that knowledge with their families.

Sandra's advice to other teachers: "My advice is to start small and seek out trusted resources and experts in AI education. Partner with another educator so you can explore and learn together. There is so much information available that it can feel overwhelming, so take it one step at a time. Learn alongside your students and build your confidence as you go."

What is AI literacy?

AI literacy is the knowledge, understanding, and critical-thinking skills that enable people to engage confidently and responsibly with artificial intelligence.

Like reading, digital literacy, and media literacy, AI literacy develops over time.

It's about helping learners develop the confidence to ask questions such as:

- How do AI systems work?
- Are AI-generated outputs reliable?
- Where do AI tools source their information from?
- How can AI tools be used responsibly?
- What real-world problems can AI solve?

These questions help learners understand both the opportunities and the limitations of AI technologies.

AI-literate learners can...

- Recognise where AI systems are used in everyday life
- Understand, at an age-appropriate level, how AI technologies function
- Question AI-generated content
- Recognise bias and misinformation generated by these tools
- Consider ethical and societal impacts of using AI systems
- Make informed decisions about using AI technologies responsibly

Why does AI literacy matter?

AI systems are already changing the way we live, work, and learn.

Young people encounter AI systems every day, through search engines, streaming services, online shopping, translation tools, navigation apps, image generators, and chatbots.

As these technologies become part of everyday life, understanding them is no longer optional – it's the basis for participating in the world confidently and critically.

Young people need opportunities to understand:

- How AI systems work
- The data AI systems are trained on
- Why AI systems sometimes produce inaccurate outputs
- How AI technologies can help to solve problems relevant to them
- When humans should make the final decision

These are essential skills for education, employment, and shaping the world around them.

Where does AI literacy fit in my classroom?

The short answer? It can fit into any subject.

AI literacy isn't just for computing lessons, it's relevant across every subject. Every curriculum area offers opportunities to explore the topic and different aspects

of AI systems from data and bias, to ethics and problem-solving. Here are just a few examples of what that could look like in practice:

Subject	Real-world context	Questions to explore
English	AI-generated writing, news and storytelling	How can we tell whether information is trustworthy?
Mathematics	Data, probability and pattern recognition	How do AI systems spot patterns in data?
Science	Healthcare, climate science, and research	Can AI technologies be used to speed up scientific discoveries?
Geography	Satellite imagery, disaster response, and climate modelling	How can AI tools help us understand our changing planet?
History	Technological change, bias, and society	Whose view on history is being reflected in the output of AI systems?
Art & Design	Creativity, copyright, and generative AI	Can AI tools create original art, and who owns it if it does?
Languages	Translation and communication	Can AI translation tools capture tone, humour, and cultural nuances?
Social studies, Citizenship & RE	Privacy, fairness, and ethics	Is it fair for AI systems to make decisions about people's lives?

Questions that work in every classroom

Whatever subject you teach, you can use these example questions to encourage thoughtful discussions about AI technologies with your students.

Could an AI system produce incorrect or misleading results?

Should humans always have the final decision?

How could someone use an AI tool to help solve this problem?

Who benefits from using AI technologies, and who might be disadvantaged?

Where might AI tools be used in this topic?

What information would an AI system require as an input?

What experts say about AI literacy and Experience AI

Educators and subject specialists increasingly recognise that understanding AI requires technical, creative, ethical, and critical perspectives.

Hear from two experts in different subject areas about their perspectives on AI literacy and how Experience AI, our free AI literacy programme, helps bring these ideas into the classroom.

Geography

“Pupils are increasingly coming into contact with AI and so it’s vital that they are taught how to harness its power in an effective and critical way. Developing resources across the curriculum to embed this knowledge, understanding and use is critical.

These resources are outstanding. They develop pupils’ geographical knowledge while simultaneously exploring the role that AI can have in a meaningful and concrete way.”



Dr Becky Kitchen

Head of Professional Development,
Geographical Association

Arts and humanities

“If AI literacy is left solely to STEM subjects or computer science, we lose the opportunity to ask deeper human, cultural, and ethical questions – questions that art is uniquely equipped to explore.

The resources move between visual analysis, practical activity and critical reflection, recognising that only in combination can AI literacy be developed effectively.”



Professor Geoff Cox

Professor of Art and Computational
Culture, London South Bank University

What is Experience AI?

Experience AI is a free education programme developed by the Raspberry Pi Foundation in partnership with Google DeepMind.

Designed for learners aged 8 to 16, it provides classroom-ready resources that help teachers introduce AI concepts with confidence.

Our resources allow you to confidently introduce AI literacy through meaningful classroom discussion and engaging learning activities.

These include:

- Lesson plans
- Classroom activities
- Videos
- Teacher guidance
- Professional development opportunities

The resources include those co-developed by the Raspberry Pi Foundation and Google DeepMind, alongside those developed independently by the Raspberry Pi Foundation.

Free resources for you and your classroom

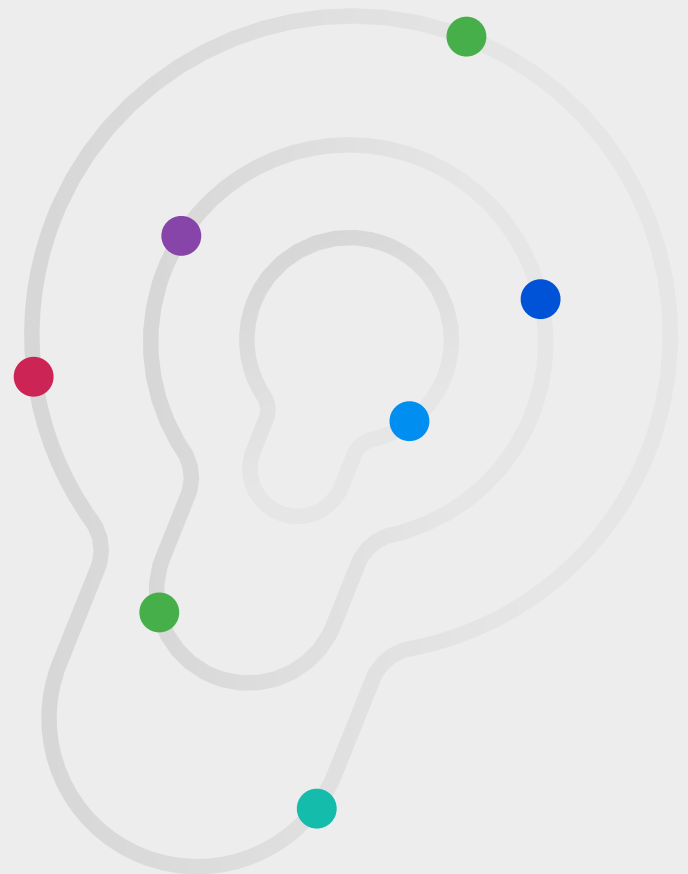
Whether you're looking for a single discussion activity or a complete sequence of lessons, Experience AI offers flexible resources that can support computing lessons or be adapted for cross-curricular teaching.

Classroom-ready lessons

Explore complete lesson sequences that introduce key AI concepts through engaging, evidence-informed activities.

Free training for teachers

We partner with organisations around the world to provide free training for educators on how to use our Experience AI resources. [Visit our website](https://experience-ai.org) to find out more and connect with a training partner near you.



Experience AI is making a difference

Since launching in 2023, Experience AI has had a global impact on AI education. It has:

5.2 million +

estimated young people reached

45,000+

educators supported

1 million+

resource downloads

195+

countries using Experience AI

22+

languages available

40+

countries with active partnerships

Award-winning resources: In recognition of its contribution to AI education, Experience AI received the 2025 UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of ICT in Education.

**2025 UNESCO
LAUREATE**

Impact in the classroom

93%

of educators said the programme increased their understanding of AI concepts

87%

reported feeling more confident teaching AI

What teachers say

“The materials make it easier to teach AI. After using them, I became more confident to guide my students.”



Lee Siew Ling,
Malaysia

“Students’ perception and understanding of AI has improved. They realised they can contribute to the development of AI instead of only being users.”



Noorlaila,
Malaysia

“My learners are really enjoying the lessons. They keep asking, ‘Teacher, when are you having computer classes?’”



John Pierce,
Kenya

5 simple activities to help you get started

You don't need to redesign your curriculum to explore AI literacy with your learners. Experience AI makes teaching about AI technologies easy. Here's how you can get started in 5 simple steps:

1

Pick one discussion question from this guide and spend five minutes talking about it with your learners, no resources required.

2

Use our [Discovering AI content](#) to introduce your students (8–16) to what artificial intelligence is.

3

Challenge your students to spot an example of AI in their own lives this week – an app, a recommendation, a chatbot – and share it with the class in your next lesson. This can tie nicely into the questions and lessons you've previously covered.

4

Get inspired by our new [Foundations of AI units](#), now split across two modules with ready-to-use lesson plans and slide decks that can be delivered in a 40-minute lesson.

5

Consider how else you can include AI literacy in your subject areas. Use our growing collection of [themed resources](#) that can be easily adapted to suit any subject.

Continue your AI literacy journey

By reading this guide and beginning conversations about how AI technology is being used in the field you teach, you're already one step closer to equipping your learners with the skills to become critical thinkers.

When you're ready to explore further, Experience AI offers free lesson plans, classroom activities, videos, teacher guidance, and professional development to help you continue the conversation.

Whether you begin with a question from this guide, explore a themed resource, or work through a full sequence of Experience AI lessons, every conversation helps build the confidence and critical thinking skills your learners need for an increasingly digital world.



About the Raspberry Pi Foundation

The Raspberry Pi Foundation is a global computing education charity, whose mission is to help young people reach their full potential through computing and AI.

We create and share resources for all teachers to bring computer science and AI literacy to classrooms, regardless of subject specialism, empowering millions of young people to develop the knowledge and confidence they need for an increasingly digital future.

All of our programmes are completely free, and have been developed using research-informed approaches and pedagogies. For more information visit our website, raspberrypi.org

Experience AI is one of the ways we're supporting teachers and learners to understand one of the defining technologies of our time.

