PSHE ASSOCIATION

Understanding AI: Rights, safety and wellbeing

Year 9/10, Lesson 1: How does AI affect our daily lives?

QUALITY ASSURED RESOURCE
PSHE ASSOCIATION

How does AI affect our daily lives?

This lesson pack for key stages 2-4 has been designed to support pupils' AI literacy. This is the first of four lessons for students in years 9 and 10. It focuses on the different forms of artificial intelligence (AI) that people may come across, and how to manage the ethical considerations of using generative AI.

These lessons should not be taught in isolation, but always as part of a planned, developmental PSHE education programme. They are best used within the context of online safety or digital literacy.

Learning objective

To learn how different forms of AI affect our daily lives and work.

Learning outcomes

Students will be able to:

- describe different forms of AI and how they can support work in different industries
- identify how generative AI works and where people might encounter it in their daily lives
- evaluate how professionals are managing some of the ethical concerns about generative AI

Resources required

- Box or envelope for questions
- Resource 1: *Types of AI* [one cut-up set per group].
- Resource 2: *Jax's week* [one per pair]
- Resource 2a: *Jax's diary* [support option as required]
- Resource 3: *Factsheet* [one per pair]
- Resource 3a: *Ethical decisions* [support option as required]

Climate for learning

Make sure you have read the accompanying teacher guidance notes before teaching this lesson. These include relevant subject knowledge for this topic, guidance on creating a safe learning environment, and curriculum links.

Baseline assessment

Introduction (Slides 8–10, 2 mins)

Establish or revisit ground rules using slide 9. Explain that if students have worries or questions during or after the lesson that they do not want to raise in front of the class, they can write their question on a piece of paper, anonymously or with their name, and put it in the question box.

On slide 10, introduce the learning objective and outcomes. Explain that today's lesson will explore different types of AI and how professionals are managing the ethical considerations about using generative AI.

Baseline assessment activity (Slide 11, 10 mins)

Ask students to work on their own to complete an AI mind map, considering:

- what is AI?
- where might someone come across AI in daily life?
- how might people use AI at work?
- what might someone want to consider before using AI?

Take feedback from volunteers to establish students' starting points and notice any common themes in their work. Consider how the lesson may need adapting depending on any gaps or misconceptions. For example, if students can't identify what someone might consider before using AI, spend more time evaluating how professionals manage ethical considerations of AI use in the third activity.

Core activities

AI in industry (Slides 12–17, 15 mins)

Ask the class for a definition of AI before sharing the answer on slide 12. Explain that AI involves computers using information to do things that, in the past, only humans have been able to do. Highlight that the word 'intelligence' can be misleading, because AI doesn't think for itself, but instead uses data to predict patterns.

In groups, give students **Resource 1: Types of AI,** and ask them to organise the examples of AI into four different categories:

- Prediction
- Classification
- Generation
- Recommendation

Take feedback using slide 14 for support.

Next, explain that AI is used to support work in different industries and share the example of education on slide 15. Show slide 16 and give each group one of the following industries: healthcare,

finance and banking, retail, manufacturing, travel, gaming, or environmental science. Ask them to discuss how AI might be used to support work in that industry.

Take feedback, drawing out key learning:

- *Healthcare – analysis of medical images (e.g. CT scans, MRI, X-ray), predicting risk of developing medical conditions from patient history (e.g. diabetes and heart disease), personalised treatment plans, virtual assistants to answer medical questions and schedule appointments, robotic surgery, wearable devices (e.g. detecting irregular heart rate).*
- *Finance and banking – fraud detection, credit scoring, trading, customer service virtual assistants, tailored budgeting tips on banking apps, predicting market trends to support investment decisions.*
- *Retail – product recommendations, customer service virtual assistants, sales forecasting to manage stock levels, virtual 'try on' for online shopping, AI cameras to monitor suspicious behaviour around high value items.*
- *Manufacturing – monitoring equipment for maintenance, product defect detection, process optimisation (reducing waste/increasing efficiency), robotics and automation, product design.*
- *Travel – personalised travel plans, dynamic pricing (i.e., adjusting prices in real-time based on demand, supply, competitor prices, time, or customer behaviour), translation tools, facial recognition and other biometrics (e.g. voice recognition and iris scanning).*
- *Gaming – non-player character behaviours, content generation (maps, characters, quests), game testing, enhancing graphics (generating realistic character movements or facial expressions), dynamic storylines.*
- *Environmental science – climate modelling and weather prediction, environmental monitoring, tracking animal populations and movements through image recognition, disaster management and early warning systems, optimising the use of renewable energy by predicting supply and demand.*

Support: Give students the gaming industry and share the prompt questions on slide 17.

Challenge: Ask students to identify and discuss how AI from each of the four different categories can be used to support work in that industry.

A week in the life of Jax (Slides 18-21, 10 mins)

Explain that as well as at work, people come across AI in their daily lives, and this is often in the form of generative AI. Use slide 18 to highlight that as generative AI tools can create new content, this often leads to the misconception that AI can think. However, generative AI is trained on huge amounts of data – this allows patterns to be identified which are then used to create new content, based on prompts provided by the user. Show slide 19 and give pairs **Resource 2: Jax's week** and ask them to highlight/circle all the examples of generative AI described in Jax's diary.

Take feedback, using slide 20-21.

Support: Give students **Resource 2a: Jax's diary** and ask them to identify which character used each example of generative AI in the diary entry.

Challenge: Ask students to discuss how the way someone uses generative AI at work might differ from using it in their personal life?

Workplace considerations (Slides 22–24, 12 mins)

Explain that although generative AI has some benefits, such as saving time, there are things to consider when making decisions about whether to use it. This is particularly important for people who need to ensure ethical use of generative AI as part of their job. To make an informed decision, users will need to consider factors such as data privacy, bias and environmental impacts. Give pairs **Resource 3: Factsheet** and give them a few minutes to read through the information.

Next, show slide 23 and explain that a headteacher at a secondary school has been thinking about buying a generative AI programme to help mark students' work and provide personalised feedback. In pairs, ask them to use the information from **Resource 3** to help answer the headteacher's questions on slide 24.

Take feedback, drawing out key learning:

- Benefits may include saving teachers time, and possibly more detailed, targeted feedback for students.
- Teachers would need to be aware of the privacy settings of the tool and how any data that is input would be used, no personal information such as students' names, school or class should be input.
- Feedback may not consider specific needs of the student; feedback may include biased content or reinforce stereotypes. Teachers would need to review and adapt the feedback.
- Teachers should be aware that using the generative AI tool may increase the school's environmental impact. They could look at ways the school could reduce energy use in other ways to offset the use of the tool. They could limit the use to a specific number of assessments each year.
- Students knowing that the teacher has not read their work may impact their relationship with the teacher. Teachers will have less understanding of the student's ability and progress.

Finally, explain that the headteacher will need to decide if the benefits of using generative AI will outweigh the negatives, and if they can put enough safeguards in place to ensure any negative impacts are minimised. Highlight that this is a dilemma many different industries and professionals are now having to consider.

Support: Give students **Resource 3a: Ethical decisions** and ask them to circle the statement that helps answer each of the head teacher's questions.

Reflection and endpoint assessment

Reflection (Slide 25, 3 mins)

Ask students to reflect on how factors like data privacy, bias and environmental impact might affect the decisions they make related to the use of generative AI. As this is a personal reflection, students do not need to share their responses with the class.

Endpoint assessment (Slide 26, 5 mins)

Remind students of the learning outcomes and ask them to revisit the baseline activity, adding new learning in a different colour, considering:

- how different types of AI are used to support different industries
- where someone might come across generative AI

- what needs to be considered for AI tools to be used ethically and responsibly

This is an opportunity to assess students' progress and identify any gaps in their understanding that may need addressing in the following lessons. Check the question box and respond to any questions you can answer immediately. Consider how you might address others in subsequent lessons in this series.

Signposting support

Signposting support (Slide 27, 3 mins)

Remind students that if they have concerns about the use of AI, it is important they speak to a trusted adult at home or at school (for example the head of year or form tutor). Students can also contact:

- Childline - www.childline.org.uk; 0800 111

Extension activity

Ethical use of generative AI (Slide 28)

Ask students to write a set of guidelines, or a checklist of questions, to help promote the ethical use of generative AI. The guidelines should include information that will help someone consider:

- the impact of bias
- environmental considerations
- data privacy
- whether using AI for a task is the most appropriate solution