

KS4 Computing Lesson Plan



Artificial Intelligence

Learning objectives

- To understand what Artificial Intelligence (AI) is.
- Understand the benefits and drawbacks that AI offers.
- Understand the use of AI in social media.
- Understand the impact AI can have on society.
- Understand the ethical use of AI with regards to plagiarism and copyrighting.

Study skills

- Researching and investigating.
- Gathering and analysing evidence.
- Forming opinions and reaching informed conclusions.
- Presentation skills.

Learning outcomes

- Students will demonstrate an understanding of Artificial intelligence including the benefits and drawbacks of it.
- Many students will demonstrate an understanding how to AI works.
- Some students will demonstrate a greater understanding of the complexity of AI and how they are many ethical concerns surrounding it.

Resources required

- Lesson Presentation
- Anagrams Starter sheet
- Computers or laptops for research and presentation
- Videos online: 'What data is being tracked?' and 'You are the product'

Introduction

- As students enter ask them to immediately start work on the **Activity 1 – Anagrams Starter** – (this will encourage them to start thinking about how these terms are all linked).
- Share the learning objectives in the **Lesson Presentation** to introduce the topic.
- Ask students what “Artificial Intelligence” is – allow them 2 mins (with timer on board) to research or discuss in pairs. Gain feedback from class and display a ‘model answer’ on Slide 2.

Main activities

- **Slide 6** – Discuss the history of AI and the Turing test.
- **Slide 7** – Explain how AI systems work using the simplified diagram.
- **Slide 8** – Display the slide on ethical concerns and read the articles with class. Alternatively, pre-print articles as hard copies for students to read independently. Engage students in a class discussion. Use **Slide 9** to take a class vote and ask a number of students to explain their opinion. Steer the conversation back to ethical concerns with regard to copyright and IP infringement considerations.

Main activities

- Activity 2 – Benefits of and Drawbacks to AI. Give students a timed period to research and create a presentation report. Choose a number of students to present their report. Alternatively, this can be used as a memory recall (retrieval practice) slide. Ask students the question and get them to 'brain dump' i.e. – write down everything they can remember about AI.
- Then go through the answers on **Slide 11** to reinforce the learning and to ensure all benefits and drawbacks have been covered.
- **Activity 3** – Watch the videos on how social media platforms use data and AI and ask students to make notes on the videos.
- Students to complete the questions on **Activity 3** and engage in a class discussion.
- **Activity 4** – Split students into groups and allocate them a scenario from **Slide 15**. In groups, students should describe how AI can help in their given scenario and to consider and make note of any potential copyright issues that may need to be addressed. Groups then feed back to the class.
- **Slide 16** – Talk about AI in education and the facts that directly impact them as young people.

Plenary

Exit pass – **Slide 19** – Ask students to write a post (no more than 15 words) to be shared on 'X' (social media platform) to summarise something they have learned this lesson.

Useful resources

DfE cyber standards - [here](#)
What is artificial intelligence - [here](#)
Britannica -artificial intelligence - [here](#)

Extension activities / home learning

Have a look at **Slide 17** – Create a piece of extended writing to answer how the Netflix AI system works. Answers should include copyright infringement considerations. An example answer is provided on **Slide 16**.