What is AI?

Topic
This lesson looks at what AI is, how it works and how it is developing.

Learning outcomes
- To enable learners to better understand AI, how it works and how it is developing
- To develop learners’ abilities to understand information delivered through video

Age/level
Age 13–17 and adults at CEFR level B1+

Time
80–90 minutes

Materials
- Presentation
- Video
- Handout – script

Introduction
This lesson plan enables learners to develop a deeper understanding of what AI is and how it is developing.

During the lesson students will:
- develop their vocabulary
- get a better understanding of AI
- discuss the future of AI
- reflect on their learning
- follow their curiosity and find out more.

Procedure
1. Lead-in (10 minutes)
   - Put the learners into small groups.
   - Show the learners the image(s) on slide 1 and ask them to brainstorm words they associate with the images.
2. Sentence game (15–20 minutes)

- Once they have brainstormed the images, show them the table on slide 2 and see if they can organise their words into the table.
- Ask them to try to find at least five words for each category.
- Once they have five words in each column of the table, ask them to work together in small groups to produce a sentence. Tell them they should try to use one word from each column.
- Get each group of learners to take turns to read out their sentence. Give them marks out of ten for their sentence depending on how accurate and true it is. You could get other groups to try to correct the sentence to get extra marks for their group.
- Repeat this process up to five times, then get the learners to total their scores.
- Thank the learners for their sentences and point out any you particularly liked.

3. Discussion (10 minutes)

- Show the learners slide 3 and ask them which of the things they think AI can do.
- You could give them some time to discuss this first.
- Get some feedback and then clarify the learners' answers.

Answers:

1. write a book – Yes, it can, but it needs human prompting.
2. create a picture – Yes, it can, but it needs human prompting.
3. make a video – Yes, it can, but it needs human prompting.
4. have a conversation – Yes, it can.
5. drive a car – Yes, it can.
6. understand your feelings – AI is being taught to do this, but at present it is still inaccurate.
7. learn – Yes, it can, though this is usually supported by humans.
8. speak multiple languages – Yes, it can.
9. think – No, it can't, though it copies processes that are similar to the ways humans think.
10. feel emotions – No, it can’t.

4. Viewing (15 minutes)

- Tell the learners they are going to watch a short video about AI.
- Give the learners the True/False statements (slide 4) and give them time to read through them.
- Ask the learners to try to predict whether the statements will be true or false.
- Play the video and ask them to watch and check their predictions.
- After the video, give the learners time to compare their answers. Monitor while they compare and see if they need to watch again.
- Play the video again if you think they need it.
- Get some feedback and clarify their answers. Alternatively, you could give them the videoscript to check their own answers.
Answers:
1. AI is new and has been developed in the last few years. – False. AI has been around for many years. The phrase ‘artificial intelligence’ was first used in 1955 by John McCarthy.
2. AI is a type of robot. – False. AI is a type of software, but it can be used in robots to help them do things.
3. AI learns by analysing and comparing examples of different things. – True.
4. AI chatbots first existed in the 1960s. – True. The first chatbot was called Eliza and it was designed in 1966 to help people talk about their problems.
5. Reactive AI remembers things that you write in your emails. – False. Reactive AI can do simple tasks like check for spam in your email, but it can’t remember or learn.
6. Limited memory AI can drive a car. – True.
7. Theory of mind AI can understand your emotions and react to them. – True/False. The aim of theory of mind AI is to be able to read and understand emotions, but this is still being developed.
8. Self-aware AI doesn’t need humans to control it. – True. Self-aware AI would not need humans to control it and it may be difficult for humans to control. This AI hasn’t yet been developed.
9. All four of these types of AI are commonly used today. – False. Only reactive AI and limited memory AI are in use at present.

5. Reading (5–10 minutes)

- Now give the learners the script from the video, show them slide 5 and ask them to make notes about each of the four types of AI.
- Give the learners some time to share and compare their notes, then ask for feedback and clarify their answer.

  Answers: These are some possibilities
  Reactive AI: basic chatbots, can answer requests and do tasks, filter spam, recommend shopping
  Limited memory AI: can store knowledge, can learn, can make predictions, more complex chatbots, self-driving cars, used most commonly now
  Theory of mind AI: can do tasks, can understand human emotions, doesn't exist, next goal of AI, could take human jobs
  Self-aware AI: understands human emotions, is self-aware, has equal or higher intelligence than humans, the point of singularity, isn't controlled by humans

- Tell the learners that the woman in the video, her voice and all the images were produced using AI tools. Ask them if they think this is ethical and what will happen to the people who used to do those jobs.

6. Discussion (10 minutes)

- Ask learners to imagine the world in 5–10 years' time. Ask them to try to imagine what AI may be able to do.
- Show the learners slide 6 and ask them to discuss in small groups what things they believe AI will and will not be able to do.
- Get some feedback from learners and ask them to share their views.
7. **Reflection (10 minutes)**
   - Show learners the questions on slide 7 and give them some time to think about them in silence.
   - Ask the learners to discuss their responses to the questions in either pairs or small groups. Alternatively, they could write their answers to the questions and share them with you.

8. **Homework (20 minutes) OPTIONAL**
   - Ask learners to find five facts about AI that they didn't know and come along to the next lesson and share what they have learned.

**Contributed by**

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