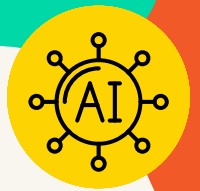


Lesson 1: Introduction to AI



Lesson aims & overview

Aim

For children to know what AI is and where they may experience it in their daily lives.

In this session, the children will focus on the following three questions:

- ★ What is AI?
- ★ What can AI do?
- ★ Where might you come across AI?

In the introduction, some definitions of important terms will be provided along with a short video produced with children in Scotland about what AI is. This session will take roughly **90 minutes** to deliver. All timings are approximate. The slides will help to guide you and the class through the content and activities.

CfE Experiences & Outcomes
LIT 2-02a; LIT 2-04a;
LIT 2-07a; LIT 2-14a;
SOC 2-17a; TCH 2-01a;
TCH 2-05a;
TCH 2-14a

Preparation for the lesson

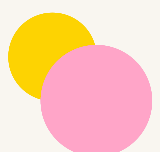
Before running these sessions with your class, **reflect** first on your **own knowledge of AI**. You do not need any kind of AI expertise to lead your class through the content and you may find it valuable to tell the children that you will be learning alongside them. However, if you feel that this is a subject area that you know little about, some **pre-reading** will be helpful. Start by reading this lesson plan and the accompanying notes, which offer suggestions for how to unpick any issues that come up around defining and identifying AI systems.

If you would like to learn more about AI, we recommend you complete the Scottish AI Alliance's 'Living with AI' course – a free, beginner-friendly resource: livingwithai.me

For a quick summary to refer to, this BBC article may also be helpful: bbc.co.uk/news/technology

Please also reflect on your own **knowledge of children's human rights** and the level of understanding of the subject by your class. If it is not a topic that the children are very familiar with, you may wish to do some work on this **before** starting these lessons. Children's Parliament's Dignity in School Hub has a variety of resources and lesson plans to support learning about children's human rights:

dignityinschool.scot/



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Lesson Slides: [To access slides, click here.](#)

Resources needed:

- Slideshow (via link above - slides include embedded video with sound)
- Pens/pencils
- Sticky notes
- Whiteboard/ flipchart
- Glossary (see additional PDF files) (optional – you may wish to print 1 per group of 2-3 children, this can also be used in later lessons)
- Charlie's Story (see additional PDF files) (optional – you may wish to print 1 per group of 2-3 children)

Introduction



Estimated completion time:
20 minutes

The UNCRC - Step 1 (10 MINUTES)

Explain to the class that this session will be the first of six that they will be completing over the coming days or weeks (depending on how you choose to run the sessions) which will help you all to understand more about AI and children's human rights. Read the children the lesson aim and key questions from the slide.

Remind the children of their human rights under the UNCRC. You can use or adapt the following script:

The UN stands for the United Nations – it was set up after World War 2 to try to make sure countries worked together in peace and harmony to make the world a better place for everyone.

In 1989, a very exciting thing happened at The United Nations. Some people think it's the most important thing ever to happen in the history of the world for children! Leaders from all the countries in the world met to talk about children. They agreed that much more needed to be done to help improve children's lives in every country around the world. They created a list of all the things children need to have in their lives to make sure they are healthy, happy and safe and to ensure that every child is treated with kindness, empathy, trust and dignity. They called these things children's human rights and they created the United Nations Convention on the Rights of the Child, or UNCRC – a document that puts all children's human rights in one place.

Does anyone want to have a go at explaining what human rights are?
(Listen to some of the children's views).

Continued ...

Helpful notes:

Purpose: To remind the children of their rights and why they are important

You will know best what your class's existing knowledge of their rights and the UNCRC is, but it is important that they are reminded of them at this stage. The text provided here helps to contextualise AI as a rights issue for the children.

This text can be read like a story. The idea is that the children come away with a sense of the UNCRC and children's rights as something that is important and special to them and other children.

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Human rights belong to everyone in the world – every adult and every child. Children's human rights are important because they are promises from adults to children, to make sure children have the basic things that they need to thrive and flourish. You can think of the UNCRC as a big book of promises.

Rights exist to help keep you healthy, happy and safe. If you ever feel worried or scared, then it is important for you to choose an adult you trust and share your worry with them. Having a right is an entitlement - something that should not be taken away from you. All your rights are equally important and they are all connected.

These rights we've been talking about protect you at home, in the classroom, in the playground, when walking or travelling to school, when playing with friends, when you're with your social worker or support worker, when out and about in your community. You have them all the time and no-one can take them away from you! Your rights are precious, like jewels, because without them, children might not be happy, healthy and safe. All of us, adults and children, must protect these rights and defend them if they are not being respected.

End.

You may want to spend some additional time referring back to other learning that children have done about children's rights and the UNCRC in school. One of the slides is a child-friendly list of all the children's rights in the UNCRC that you can refer to with your class.

Step 2 (5 MINUTES)

Ask the children to share what they know about AI in a brief discussion (try to limit this to five minutes max), explaining that it doesn't matter at this stage if they're not 100% sure about something, this is just to gather some thoughts. Hand out sticky notes and ask the children to work in pairs or small groups to note down as many examples as they can and come up to stick them on a whiteboard or sheet of sugar paper so you can refer back to their initial ideas later.

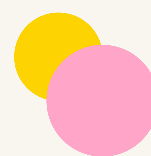
Helpful notes:

It is important that we avoid talking about 'rights and responsibilities' when we're talking about the UNCRC and children's rights. Under the UNCRC, all children have these rights, and these rights should be upheld regardless of the actions or behaviour of the child.

Throughout the project 'Exploring Children's Rights and AI', Children's Parliament found that children were able to use what they learned about children's human rights to support them to think critically about the impacts of AI on their lives. The children's rights content in this resource is integral to helping children understand AI in context.

Helpful notes:

Purpose: To introduce key AI vocabulary and gain an understanding of the children's prior knowledge.



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Step 3 (5 MINUTES)

Click through to the slide with the video explainer 'What is AI?' embedded. Play the video to the class. If the children have any thoughts or questions about the video, take a couple of minutes to discuss these.

Step 4 (5 MINUTES)

Click through the definition slides (defining the key terms 'AI', 'algorithm' and 'data') and read the definitions to the children. You may wish to ask the class some quick questions to check their understanding. Click through the slides explaining the main functions of AI systems (classify; predict/suggest; generate) and ask the children if they can think of another way of explaining each of those words (they might suggest terms like 'group'; 'guess'; or 'create'/'make').

Warm-up game: 'How to spot an AI system'



Estimated completion time:
20 minutes

'How to spot an AI system'

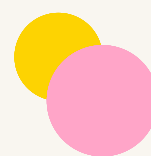
In this game, the children will begin to learn how to differentiate between AI systems and other technologies by thinking about what function a technology is carrying out and what level of human involvement is needed. You can start by reminding the children that an AI system is a computer programme that can complete tasks that we would usually expect a human would have to do. The activity takes the children through some questions formatted as a flow chart in the slides. For each of the questions below, some additional tips and considerations are included in the notes column to the right.

Ask the children for an example of a technology that they think might use AI and use the questions to decide together if it does or not. Try this with a couple of different examples and use any points where there is uncertainty to discuss what the children learnt in the introduction. It may be that you're unable to decide as a class for some examples – this is okay! It's important to be open about how this topic is quite complicated and can be confusing for adults as well.

Helpful notes:

Purpose: To explore some of the ways to recognise an AI system. This is also a useful activity for finding out how complicated recognising AI can be.

Question 1: It is important to note that robotics and AI are two separate technologies. Robots are machines that may be controlled by an AI system but are more often controlled by people. AI systems do not have a physical form - they are computer programmes. However, not all computer programmes involve AI and some computer programmes may use AI systems for some tasks but not others, so it is not always easy to spot when you are interacting with an AI system.



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'To include some movement in the activity and ensure that all children can express their views, ask the children to stand and move to one side of the room or the other depending on which of the answers (i.e. 'yes' or 'no') they have chosen.

1. **Is it a computer programme? (yes/no)**
2. **'Can it do things itself without someone controlling it? (yes/no)**
3. **Does it adapt or change the way it does things the more it is used? (yes/no)**

Pause and briefly discuss any differences of opinions, asking the children if they can explain why they have chosen either answer. It is fine to leave some of these undecided, you can return to examples that you and/or the class weren't sure about once you have learnt more about AI together.



Helpful notes:

Question 2: You may find children assume something is an AI system when thinking about a particular computer programme where in fact it relies on human input to carry out its functions. It may be helpful to prompt children to think about whether the programme is classifying, predicting or generating anything.

Question 3: An ability to take in data and give a response that feels like a response a human might give to a question, prompt or other input is usually a good sign that a technology is using a type of AI system. Likewise, if a technology gets better at performing a function by learning from data that is inputted, it is likely to be an AI system. Try to avoid describing artificial intelligence as 'like' human intelligence, though, because AI systems do not think, they follow instructions. An AI system cannot do anything it has not been programmed to do by a person.

Main Activity – Charlie's Story



Estimated completion time:
35 minutes

Step 1 (5 MINUTES)

Display the Charlie's Story slide and read through together as a class.

Step 2 (15 MINUTES)

In small groups (2-4 children), ask the children to go through the story again themselves and make a note of (or underline/highlight if using the printable version) each example of an AI system that they can find in the story.

Helpful notes:

Purpose: To consider how AI is used in the world around us and apply what the children have learned so far, so a decision can be made about which technology does and does not include an AI system.

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Step 3 (15 MINUTES)

Come back together as a class and go through the story again, inviting the children to raise their hands each time they come across something that they think is a mention of AI. Pause to discuss the examples as they come up (use the answer sheet to help explain to the class which examples involve AI). Make a note of any where there is confusion or disagreement.

Final Discussion



Estimated completion time:
10 minutes

Get together as a class, preferably sitting in a circle so everyone can see each other, and explain that we're going to finish by having a chance to reflect on what we've learnt.

First, ask the children to think back to the examples they suggested when asked about AI at the beginning of the lesson.

- Are there any that you've changed your mind about?
- Are there any that you feel you understand better now?
- What have you learned about them?

Ask the children to think about the children's rights that they know about, they can use the slide to remind themselves of others. Explain that in the next few lessons we'll be learning a bit more about how AI works, where we find it, and how it might affect children's rights. Does anyone have any thoughts today on how AI might affect their lives or their rights? It could be positively or negatively. Make a note of any ideas that the children have. These thoughts, hopes and concerns can be referred back to throughout the sessions where relevant.



Additional activities and resources

- The printable glossary in the lesson pack can be used by the children as a reference for this and future sessions.
- A child-friendly version of the UNCRC can be found on Children's Parliament's 'Wee Book of Promises' page here: <https://www.childrensparliament.org.uk/wee-book-of-promises/>
- In this video, children explain children's human rights and the UNCRC in their own words: <https://www.youtube.com/watch?v=hncO9xpcOGo&list=PL9oSX4FZBIPVve-8TnfbRiiypZppT6Gcz&index=2>

Activity: AI Quiz (see additional PDF files)

This simple multiple choice quiz can be used by the children individually, in pairs or in small groups to consolidate their learning by testing themselves on their understanding of what AI is, what it does, and how it works.

