

IO3 – School Program for Primary Education Students

Learning activities Template



Questions/Problems for each topic

Topic	Question/Problem*
Information and media literacy	<i>Can AI help you in your search for information for your science paper?</i>
Communication and collaboration	<i>Do you think Google might be able to order your favorite pizza?</i>
Content creation	<i>Can AI do my homework?</i>
Responsible use	<i>What do you think is the dark side of AI?</i>
Problem Solving	<i>Why does the mobile phone unlock with my face?</i>

**These questions can be changed if partners suggest another one*

In order for primary school students to see the usefulness of artificial intelligence in situations that may interest them and that may be close to their life experience, partners will start the research (theory) section with a question. Here is a table with a proposal for each topic. Once the question has been defined, partners should think about what information and materials they should provide to students to solve the problem. This content can be taken from the workshops conducted for the IO2 training. In order to make the activity more fun, partners will use tools, games and AI elements provided in IO1 to create more interactive and attractive research tasks. To complete the research, partners should think about how they will assess that users have developed the knowledge necessary to solve the problem. This can be done with a reflection activity, or a quiz, breakout, game...

Learning activities Template

Use this template to design and develop the two Learning Activities.

Question/Problem	Is AI always ethical?
Level (Basic/Advanced)	Advanced
Introduction	
<p>Today, you will examine if AI is always ethical or not. Being ethical is similar to being a good person. We learn that it is wrong to steal, hurt others, lie, and that it is good to take care of other people, be trustworthy, honest, and respectful. Not only can humans be ethical, but AI as well.</p> <p>For example, AI must be trustworthy, and cannot harm us. It is not ethical when an AI system tries to hurt us, nor is ethical for an AI system to lie to us.</p> <p>But is AI always ethical? You will find out in this lesson. First, you will play a game to find out that AI knows us very well and use information against us. And second, you will play a game where you will see that sometimes it is very hard to let AI make an ethical decision.</p>	
Process	

AI knows us better than we know ourselves

First, let's see what AI can do. Go and play the mini-game, try to win against an AI system at a simple game of rock-paper-scissors <https://www.afiniti.com/corporate/rock-paper-scissors> Play it at least 25 times. Do you notice something? Is it starting to get harder to win?

That is probably because the AI model started to see a pattern in your choices for rock-paper-scissors. You see, we humans are very bad in choosing randomly between rock, paper, and scissors, after a few games. And that is something an AI system can pick up on. For example, there is a chance that we prefer playing rock after scissors, more than playing paper after scissors. Or we never play something three times in a row. Afiniti, learns to identify these patterns in your choices, and based on the patterns, it can predict your next move. If it can predict your next move, it can very easily beat you.

Now, what this means is, that sometimes AI knows us better than we know ourselves.

Platforms such as Netflix, YouTube, TikTok, and Instagram, cleverly make use of this. The goal of these platforms is for you to spend as much time as possible on their platforms. So how do they do this?

Well, they use AI to find out what kind of movies or videos you like to watch. Just like before with the game, where AI was able to predict your next move, AI is also able to predict another movie or video that you will like. It will search for patterns in all the previous movies and videos that you watched, and then find out what you will like next. Once the AI system knows this and share it with the platforms, they will offer you all these types of videos that you seem to like! And what do you do? You will keep watching these videos, because you like them so much!

Although this is very easy for us, because we don't have to search for new fun videos ourselves, this can also be unethical, meaning not right. Can you think of reasons why?

Ethical decisions

When we right an algorithm, we are writing rules or a step-by-step recipe that an AI system has to follow. It seems very easy to write algorithms that will behave ethically. For example, when we are writing algorithms for a self-driving car, we can tell the car that when it sees a person in front of it, the car should stop. Or when it sees a red light, it should stop. But sometimes it is not so easy.

Imagine you are designing a self-driving car. Open this website and play the game. Think about what you would program the car to do in those situations. **Game:** <https://www.moralmachine.net/>

What is easy? Probably not. But if we already find it difficult to decide what to do in these situations, how is a self-driving car supposed to do this? Will it always make the right, or ethical, decision?

Final activity

Now you will have a reflective session. Try to answer these questions with a classmate:

- How can we let the self-driving car make ethical decisions? Or isn't it possible?
- **Do you think it is ethical that TikTok and Instagram use so much information about you? If yes, why? If not, do you think they should stop doing that?**
- **Imagine that your neighbor would be run over by a car and ends up in the hospital. Would you be more mad if it turns out the car was a self-driving car? Would you be more mad on an AI system than on another human that made a mistake? Why?**

