

Generation AI

IO3 – School Program for Primary Education Students

Tutor Handbook – CARDET



Introduction to the Tutor Handbook

The aim of this short handbook is to support you, as an experienced tutor, to use the Generation AI Lesson Plans with learners in your group. If you are currently working as a Primary Education Teacher, this handbook will help you to introduce the Generation AI Lesson Plans in your workplace. When developing these Lesson Plans, the focus has been to support young learners in developing an evidence-based understanding of the complexities and basic principles of AI, computational thinking, and how they can be integrated in teaching learning to promote creative problem solving, resilience, and design thinking.

This Lesson Plan is a part of the ‘Problem Solving’ topic and is targeted to children between 9 to 11 years old. This topic aims to provide learners with the basic knowledge of digital problem solving competences and, more specifically, how AI can contribute to promoting and adopting more sustainable ways of life.

Introduction to the Competence

The DigCompEdu framework distinguishes six different areas in which educators’ Digital Competence is expressed with a total of 22 competences. Problem solving is listed as the 22nd competence and it falls under the category ‘*Facilitating Learners’ Digital Competence*’. It is defined as the competence to incorporate learning activities, assignments and assessments which require learners to identify and solve technical problems, or to transfer technological knowledge creatively to new situations (DigCompEdu, 2016).

This Lesson Plan is aimed to develop these skills of young learners through Artificial Intelligence tools. More specifically we will be using AI object recognition tools, that can separate objects into different pre-defined categories.

Elements of the Lesson Plan

Video

This video is a simple introduction to the concept of Artificial Intelligence. It provides children with a general understanding of the term and facilitates them to identify AI tools that they may already use in their daily lives even though they may not realize. It then focuses on the idea of object recognition and the contribution it can have in the promotion of a more sustainable way of life. This video is the first element of the Lesson Plan, and you can find it in the platform of Generation AI project as an embedded video of YouTube. It helps to contextualize the following elements of the lesson plan: learning activity and challenge.

Learning Activity¹

The second element that you will find in the Lesson Plan is a research task. This task consists of a guided activity that aims to help students come up with a reflection about a question/problem proposed.

This question/problem aims to give learners the opportunity to know how AI can affect their daily lives in a simple and ludic way.

In this lesson plan the question/problem is ***'Can AI help us promote sustainability'?***

As this is a guided task, you will need to ensure that students follow each of the steps and links provided in the activity. However, having in mind that not all resources and means are available to all educators, several alternative methods are suggested in the learning activity.

¹ The Learning Activity is offered as a guided task and is available in a [brief version](#) and a [detailed version](#).

Challenge

This last element of the Lesson Plan is an AI based tutorial game. It aims to sensitize young children regarding the need for preserving the environment and to introduce the idea of implementing AI towards this direction.

The tutorial is related to the 'Problem Solving Digital competence and is created to help students develop their own game using Machine Learning and Scratch.

The tutorial is a step-by-step guide on how to create an AI game. It is presented in PDF format and you can find it in the platform as the final activity of the lesson plan.