

AI Basics for Schools MOOC

AI Learning Activity

WHAT IS AN AI LEARNING ACTIVITY?

AI facilitates a creative approach to long-term and short-term didactic design approaches, but also to the actual realization of the teaching-learning-evaluation process.

AI applications help to shape students' personality, in acquiring and developing both the digital skills themselves and the skills needed for lifelong learning, for integration into a knowledge-based society.

In implementing the activity we started from questions asked to students about:

What things are easy to do for computers and difficult for people?

How should a computer be taught to drive like a human?

By what means can information be processed faster?

A video for familiarization:

<https://youtu.be/MaTfzYDZG&c>

BASIC INFORMATION AT A GLANCE

Provide basic information about your AI learning activity:

Extensive learning opportunities about artificial intelligence will allow students to create scenarios that have applicability in practice.

- We provided students with computer support about artificial intelligence, how it works and how AI technologies could affect employment and education in the future.

Creating a report on:

- Explain the evolution of artificial intelligence
- Examine various career options related to artificial intelligence

Name of author:	Ristea Lidia
Subject:	<i>(List the subject(s) that the activity is intended for)</i> Science, Programming, ICT, Biology
Title of activity:	<i>(Give a descriptive title for your activity that tells the reader at first sight what you will be doing e.g. Colouring book, Write a story, Composing a song)</i> " A story about my gamming "
Topic of activity:	<i>(Write the topic of your activity: e.g. experiment with arts, text generation, music experiment)</i> They will work in the BuildBox application To get acquainting with this application, I presented a video material: https://youtu.be/2Dnz3OjY04g Applications that use artificial intelligence algorithms. Students will receive 3 themes for this application, depending on their visual skills, where they will create an animation, a script, or a team game of two students each. For starters they will use a template to discover and identify the working tools in this application.
Learning objectives:	<i>(What you would like your students to achieve by the end of activity)</i> <ul style="list-style-type: none"> - knowledge of the basic concepts of artificial intelligence, which - include elements of algorithms, modeling, programming, elements of accumulation, storage and intelligent processing of information; - development of algorithmic thinking for organic integration of - in the modern and forward-looking information society. - training practical skills for using digital media for the intelligent processing of information in order to achieve quality final products.
Preparation time:	<i>(How much time is needed to prepare this activity)</i> 90 min
Teaching time:	<i>(How long does the activity last)</i> 25 min

Materials needed:	<p><i>(List tools, links and resources required for the implementation of the activity)</i></p> <p>Examples of machine learning Buildbox tutorial https://www.buildbox.com/help/buildbox-3-manual/getting-started/</p> <p>Model application using Buildbox https://www.makeuseof.com/wp-content/uploads/2016/07/How-to-Make-a-Video-Game-in-a-Week-Using-Buildbox.pdf</p> <p>https://www.tensorflow.org/js/demos/ Model game https://storage.googleapis.com/tfjs-examples/webcam-transfer-learning/dist/index.html https://emojiscavengerhunt.withgoogle.com/</p> <p>https://www.afiniti.com/corporate/rock-paper-scissors https://experiments.withgoogle.com/mystery-animal https://emojiscavengerhunt.withgoogle.com/</p>
Age of students:	11-13
Other relevant remarks:	<p><i>(e.g. prior knowledge, number of students, is the activity suited for hybrid/online/physical classroom)</i></p> <p>The students do not have previous knowledge about artificial intelligence, don't have in the curriculum and for this reason we used introductory information about it, by presenting video materials and information media.</p> <p>This activity will be attended by 25 students and is suitable for all types of activities: online, face-to-face, hybrid.</p> <p>The Buildbox application is one of the best in which the students can work for put in practice the visual abilities, they can make "smart" decisions to create the useful applications.</p> <p>The students by using this application will have the opportunity to develop basic digital knowledge and skills to use the tools offered by this application.</p> <p>The intelligent data processing in the field of real sciences and socio-human sciences will help students to show critical thinking, clarity and correctness.</p> <p>By using algorithms for methods of intelligent analysis of data synthesis and problem solving, they will demonstrate creativity and perseverance in what they do.</p>

SHORT DESCRIPTION OF YOUR AI LEARNING ACTIVITY

Describe briefly the activity you are planning to implement in the classroom in at least 200 words and no more than 300 200 words:

A1. Presentation of useful information about AI

- What is AI?
- How can AI technologies affect work and education?
- What will happen to AI in the coming decades?
- What career options related to AI can exist?

<https://www.slideteam.net/10-minutes-presentation-about-myself-powerpoint-presentation-slides.html>

A2. Distribution of a KWL worksheet. Students will complete the first column and write down what they know about artificial intelligence.

They will specify which devices they will imagine being used to build houses of the future

Kwl - The second column "What would you like to learn?"

Write in the second column what you want to new learn ?

The third column

Specify what you have learned, and how you can put into practice the knowledge you have gained

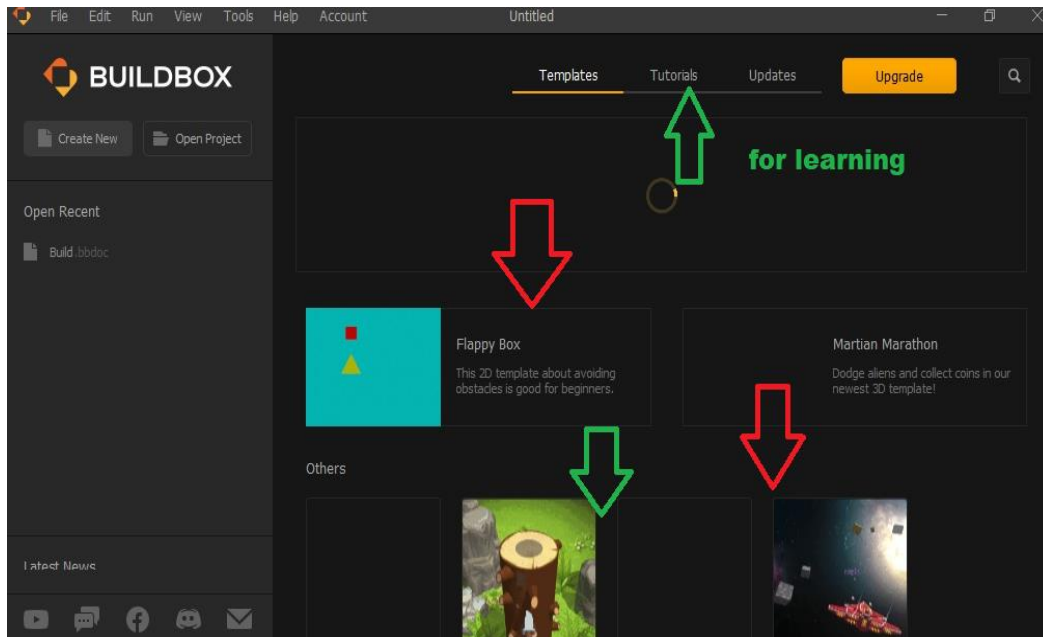
A3. For this activity I chose to present the BuildBox application, what it is used for, how I can use it and what I can create with it.

This tool is one with digital action and aims to create game-based products that solve real-life problems, manifesting innovative approaches and practicality.

Students will interact with each other in the virtual space, collaborate and cooperate for active learning and to put into practice the skills they will acquire.

They will promote in digital environments the personal achievements can be put into practice.

Students will have to make an animation using templates from the application, geometric figures or they can create a new application according to the explanations in the tutorial or the models presented.



Each plan includes all the basic features of BuildBox, such as menu editor, scene editor, actions, effects, logic, money generation and creator with all the game possibilities. The main difference between the plans is the total amount of worlds, scenes and export options they will be able to include in the game.

Creating a team game to use artificial intelligence algorithms.

Students will create animations about avoiding obstacles, space travel, using templates in the application, which they can modify and process.

EARN AN EXTRA CERTIFICATE

Are you ready to take your activity to your classroom? We invite you to add it to the [Code Week map](#) to get an extra certificate.

I posted on the map an activity that I will put in practice with the students.

Other Things:

I will ask students to complete a questionnaire about their future careers to see where their interest lies and to discuss how their interests can align with career opportunities associated with artificial intelligence.

- I will invite an Artificial Intelligence specialist to class to discuss the role that artificial intelligence plays in factories, industries, personal life and communities in the near future.

