



FACILITATE-AI

GUIDELINES FOR FACILITATING THE LEARNING OF ARTIFICIAL INTELLIGENCE
BY SCHOOL STUDENTS OF GRADES 7-12

Guidelines for facilitating the learning of Artificial Intelligence (AI) by School Students of Grades 7-12

Reference Number: 2021-1-CY01-KA220-SCH-000032567

C2 Training course: **Verification of training curriculum and developed learning materials**

Result 2 – A3

Module Number and Area/Topic: 3.7 AI Profession Orientation Chatbot

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Introduction and Broad Description of the Context and Goal of the area/topic addressed

Career guidance in the era of fast changing employment world is crucial for today's young students. So far, only limited research has been conducted on using artificial intelligence to support guidance across primary and secondary education and professions. This L&C Plan will provide a guide to create an AI chatbot that will help students explore professions that they might be interested in, according to their hard and soft skills and their personality. In this way students will value the importance of using artificial intelligence to support career guidance in education and get familiarized with cognitive intelligence.

Learning objectives and learning outcomes

Upon completion of this L&C Plan, students will get familiarized with the AI methods used for chatbots and will develop their own example for profession orientation.

The outcomes will be:

- Understand basic AI methods used for chatbot development
- Develop a cognitive AI based chatbot
- Explore how specific soft skills are related to specific professions
- Self-reflect, communication skills enhancement

Competences

Handling basic functionalities of Microsoft Excel would be useful when building their own chatbot in the proposed platform. No programming knowledge is needed.

Instruments/Tools/Supporting Material/Resources to be used:

The teacher presents and demonstrates the needed resources through a projector. One computer per student group is the minimum requirement.

- The following tool can be used as an initial inspiration to experiment with what is considered the best AI chatbot today: <https://openai.com/blog/chatgpt/>

- Juji will be used to create AI chatbot without coding: <https://juji.io/>
- <https://openai.com/blog/chatgpt/> A new cutting-edge AI chatbot that can be used as motivation for the purposes of this L&C Plan.
- <https://eic.eisma.eu/challenges/solution/jobiri-1degai-based-digital-career-advisor/about> This is the first AI based digital career advisor, Jobiri. It can be used as a first reference on what is available for profession orientation.
- Introduction to Large Language Models, Google, https://www.cloudskillsboost.google/course_templates/539

PART 1	
Learning Objectives	Intoduction to Machine Learnig (ML), Natural Language Processing (NLP), Deep Learning (DL), Artificial Neural Networks (ANNs)
Learning Outcomes	Students are introduced to chatbot, applications and Underlying Technology
Competences	Digital Competencies
Activities	Activity 1: Introduction to AI, ML, DL and their application today, performed by the teachers as described in STAGE I (60 min).

PART 2	
Learning Objectives	Familiarize with existing AI chatbots
Learning Outcomes	Hands-on experience with chat-GPT
Competences	Digital Competencies
Activities	Activity 2: T1 demonstrates existing AI-based chatbots to engage students and students experiment with OpenAI's new cutting edge ChatGPT chatbot. Teachers and students discuss how this chatbot works (40 min).

PART 3	
Learning Objectives	How chatbots are developed
Learning Outcomes	Chatbot for profession orientation
Competences	Digital Competencies
Activities	Activity 3: Students perform initial research on existing AI chatbots used for profession or career orientation (60 min). Activity 4: Students get familiar with the Juji platform, and the steps needed for developing a chatbot on their own. They form groups and assign roles for the design, development, and testing steps (60 min).

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