



LEARNING UNIT PLAN

DALFYS

DATA Literacy competences For Young students towards STEAM education
2020-1-IT02-KA226-SCH-095305

Title	Programming (Digital content creation)
Outcome	Students will have learned the basics of programming
Target (indicate the age of students)	15 y.o. (1st grade of secondary school)
Pre-requisites (indicate what student should know before starting this learning unit contents)	Students should get familiar with popular programmable educational sets, such as LEGO Education WeDo 2.0, SAM Labs Curious Cars, Bee-Bot, Ozobot EVO, Micro:bit etc.
Period of application (indicate when you start and when you end the learning unit)	September - November 2022
Assessment (how does this lesson relate to assignments/homework/readings)	Students will read about the elements and functions of selected programmable educational sets and present their findings in pairs to the class
Goals of the unit	<ul style="list-style-type: none"> - Students will be able to explain what programmable educational set is. - Students will know what elements are included in the programmable educational set and what their functions are. - Students will know what projects can be implemented using the programmable educational set. - Students will be able to plan and develop a sequence of understandable instructions for the programmable education set to solve a given problem or perform a specific task.

Competence/s	Programming (Digital content creation), Problem solving, Communication and collaboration.
Evaluation	Teacher observation form.
Description of the steps	
1st step	
Name of the teacher: To be determined	
Subject: Basics of programming as part of the core curriculum for 1 st grade	
Knowledge	Skills
Knowing what programmable educational set is.	- Finding information in texts, - Using tools, - Group work.
Content:	Introduction to the basics of programming.
Description of the Activity:	Work with textbook. Work in small groups with programmable educational sets.
Time (indicate how many hours of lessons are needed)	1 lesson x 45 minutes
Used resources:	Textbook / Internet / Apps
Students accomplishment:	Students will have learned about the basics of programming through research and collaboration.
Method	Educational projects / Robotics science projects
Tools	Programmable educational sets / Apps / Worksheets
2st step	
Name of the teacher: To be determined	
Subject: Basics of programming as part of the core curriculum for 1st grade	
Knowledge	Skills
Knowing what elements are included in the programmable educational set and what their functions are.	- Using tools, - Group work.
Content:	Introduction to the basics of programming.
Description of the Activity:	Work in small groups with programmable educational sets
Time (indicate how many hours of lessons are needed)	1 lesson x 45 minutes
Used resources:	Internet / Apps

Students accomplishment:	Students will have learned about the basics of programming through research and collaboration.
Method	Educational projects / Robotics science projects
Tools	Programmable educational sets / Apps / Worksheets
3st step	
Name of the teacher: To be determined	
Subject: Basics of programming as part of the core curriculum for 1st grade	
Knowledge	Skills
Knowing what projects can be implemented using the programmable educational set.	- Using tools, - Group work.
Content:	Basics of programming
Description of the Activity:	Work in small groups with programmable educational sets
Time (indicate how many hours of lessons are needed)	2 lessons x 45 minutes
Used resources:	Internet / Apps
Students accomplishment:	Students will have learned about the basics of programming through research and collaboration.
Method	Educational projects / Robotics science projects
Tools	Programmable educational sets / Apps / Worksheets
4st step	
Name of the teacher: To be determined	
Subject: Basics of programming as part of the core curriculum for 1st grade	
Knowledge	Skills
Knowing how to plan and develop a sequence of understandable instructions for the programmable education set to solve a given problem or perform a specific task.	- Using tools, - Group work
Content:	Basics of programming
Description of the Activity:	Work in small groups with programmable educational sets
Time (indicate how many hours of lessons are needed)	2 lessons x 45 minutes
Used resources:	Internet / Apps
Students accomplishment:	Students will have learned about the basics of programming through research and collaboration.
Method	Educational projects / Robotics science projects
Tools	Programmable educational sets / Apps / Worksheets

