



3rd workshop – Games and Tools for Programming

Session 1: Inquiry Based Learning and basic programming concepts

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Expected Learning Outcomes

1. Describe principles of Inquiry Based Learning.
2. Identify the basic programming concepts.
3. Recognise the basic programming concepts in examples of different didactic games.
4. Analyse and compare existing examples.

Teaching Methods/Approaches

1. Teacher presentation and instructions
2. Group activity - collaboration
3. Individual activity

Sources of training materials

Games:

Run Marco: <https://runmarco.allcancode.com/> (5.1.2019.)

Blockly-games: <https://blockly-games.appspot.com/?lang=en> (5.1.2019.)

Code.org: <https://studio.code.org/> (5.1.2019.)

Duration: 60 minutes



Topic/Sub-topics	Learning Objectives	Evaluation
1. INQUIRY BASED LEARNING	<i>Participants will be able to describe and explain the principles of Inquiry Based Learning, analyse and apply concepts of Inquiry based Learning in different school subjects.</i>	1. Learners discuss concepts of Inquiry Based Learning and describe an example of lesson (group activity).
1.1 Introduction to Inquiry Based Learning	1. Describe principles of Inquiry Based Learning. 2. Apply concepts of Inquiry Based Learning.	
2. BASIC PROGRAMMING CONCEPTS	<i>Participants will be able to identify the basic programming concepts.</i>	1. Learners explore existing didactical games and point out programming concepts (individual activity). 2. Learners analyse existing didactical games and discuss the advantages and disadvantages of the games and possibilities for didactical implementation (group activity).
2.1 Introduction to basic programming concepts	1. Describe the basic programming concepts (algorithms, sequence of instructions, conditional sentence, loop, variable).	
2.2 Didactic computer games for learning basic programming concepts	2. Recognise the basic programming concepts in examples of different didactic games. 3. Analyse and compare existing examples.	