

# 2<sup>nd</sup> workshop – Problem Based Learning (PBL), online guizzes and logical tasks

# Session 2: Online quizzes and logical tasks

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#### **Expected Learning Outcomes**

- 1. Choose of logical tasks suitable for different school subjects and providing propaedeutic for algorithms and programming
- 2. Create new examples of logical tasks suitable for different school subjects and providing propaedeutic for algorithms and programming

### **Teaching Methods/Approaches**

- 1. Teacher presentation and demonstration
- 2. Group activity
- 3. Individual activity in form of online quizzes and games.

## Sources of training materials

Bebras, International Challenge on Informatics and Computational Thinking. Available: <a href="https://www.bebras.org/">https://www.bebras.org/</a> (Accessed: 30.06.2018.)

LearningApps. Available: <a href="https://learningapps.org/">https://learningapps.org/</a> (Accessed: 04.07.2018.)

Teaching London Computing. Available: https://teachinglondoncomputing.org/ (Accessed: 04.07.2018.)

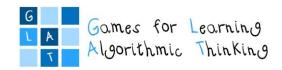
e-laboratorij CARNet, ankete/kvizovi. Available: <a href="http://e-laboratorij.carnet.hr/category/interaktivni-sadrzaji/">http://e-laboratorij.carnet.hr/category/interaktivni-sadrzaji/</a> (Accessed: 04.07.2018.)

#### Web 2.0 tools:

- Learningapps, Available: <a href="https://learningapps.org/">https://learningapps.org/</a> (Accessed: 4.7.2018.)
- Kahoot. Available: <a href="https://kahoot.com/">https://kahoot.com/</a> (Accessed: 30.6.2018.)
- Wizer. Available: https://app.wizer.me/ (Accessed: 30.6.2018.)
- Match the memory. Available: <a href="https://matchthememory.com/">https://matchthememory.com/</a> (Accessed: 4.7.2018.)

**Duration:** 90 minutes

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| Topic/Sub-topics   | Learning<br>Objectives  | Evaluation   |
|--|---|--|
| Logical tasks and quizzes for development of algorithmic skills and thinking   | Participants will be able to classify logical tasks for propaedeutic of algorithm and programming and construct quiz appropriate for implementation.    | Learners explore examples and resources in order to discuss different type of tasks for development of algorithmic skills and their application in school. |
| <b>1.1</b> Classification of tasks for development of algorithmic skills and thinking. Examples from different school subjects.  | Classify logical tasks providing propaedeutic for algorithms and programming  |  |
| <b>1.2</b> Main requirements for online quizzes development.   | 2. Construct quizzes, appropriated for online implementation.   |  |
| 1.3 Demonstration of examples of different logical tasks and quizzes developed in Web 2.0 environment (Learningapps.org, Kahoot etc.) and applicable in school subjects. | 3. Experiment with existing examples of logical tasks and quizzes in form of games.   |  |
| 2. DEVELOPMENT OF EXAMPLES OF LOGICAL TASKS AND QUIZZES  | Participants will be able to create examples of logical tasks, appropriate for different school subjects.   | Learners modify some of examples and discuss the possibilities of implementation of the tasks in school subjects and lessons (group activity).             |
| <b>2.1</b> Modification and adaptation of examples of logical tasks for different school subjects.   | <ol> <li>Create new examples of logical tasks based on given examples.</li> <li>Give new examples of logical tasks for algorithmic thinking.</li> </ol> |  |
| <b>2.2</b> Development of examples of logical tasks  |   |  |

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