2nd Workshop – Problem-Based Learning, online quizzes and logical tasks

Session 1: Introduction to Problem-Based Learning (PBL)

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Expected Learning Outcomes

1. Demonstrate competence in the principles, process and application of Problem-Based Learning in learning situations/scenarios.
2. Use the principles pf PBL to design lessons for stimulating Algorithmic thinking in problem solving engagements.

Teaching Methods/Approaches

1. Facilitator presentation/instructions
2. PBL Case illustrations and demonstrations
3. Practical activity by participants
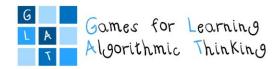4. Peer-review and reflection activities

Sources of training materials

1. Video "Learning scenario designing environment LePlanner.net". Available: https://vimeo.com/168032150 (Accessed: 20.8.2018.)
2. LePlanner. Available: https://beta.leplanner.net/#/ (Accessed: 20.8.2018.)
3. Rõbtšenkov, Romil: LePlanner a tool for creating learning scenarios.
   Available: http://htk.tlu.ee/event/wp-content/uploads/2016/05/romil_robtsenkov.pdf (Accessed: 20.8.2018.)
4. Clayton, Graham & Pierpoint, Peter: Problem Based Learning: A Would-be Practitioner's Guide, University of Plymouth Business School, 1996
   Available: http://www2.uwe.ac.uk/faculties/BBS/BUS/Research/NTFS/problem.pdf (Accessed: 20.8.2018.)
5. Christiansen, E. T., Kuure, L., Mørch, A., & Lindström, B. (Eds.): PROBLEM-BASED LEARNING FOR THE 21st CENTURY: New Practices and Learning Environments (1 ed.), Aalborg Universitetsforlag, 2013.
   Available: http://vbn.aau.dk/files/187818413/PROBLEM_BASED_LEARNING_FOR_THE_21st_CENTURY_WEB.pdf (Accessed: 20.8.2018.)
6. Jurković, Violeta. (Ed.): Guide to Problem-Based Learning, Ljubljana: Slovene Association of LSP Teachers. 2005.
   Available: http://www.sdutsj.edus.si/SDUTSJ_Guide_%20to_%20PBL.pdf (Accessed: 20.8.2018.)

Duration: 60 minutes

Topic/Sub-topics	Learning Objectives	Evaluation
1. INTRODUCTION TO PROBLEM-BASED LEARNING	*Participants will able to demonstrate competence in using the principles and process of the PBL approach to solve problems.*	1. Learners explore and distinguish PBL from other learning approaches; and argue for its relevance or otherwise – relative to the various learning scenarios.
1.1 Problem-Based Learning Explained (definition and descriptions)	1. Explain and describe PBL – with the emphasis of relevant descriptors.	
1.2 Key principles of Problem-Based Learning	2. Identify and describe the key principles and characteristics underpinning PBL	
2. PRACTICAL – HANDS ON PBL ACTIVITIES	*Participants to engage in identification PBL related cases, demonstrate ability to address them and review proposed solutions.*	Learners identify, real life or learning cases where PBL is applicable, define the problem and use PBL principles to propose solutions to the problems in groups.

Engage in peer-reviewing of proposed or administered solutions. |
| **2.1** Modelling PBL approach in conceptual problem cases/learning scenarios. | 1. Identify real life and learning cases and where PBL could be applied.

2. Propose process and procedures in the PBL approach. | |
| **2.2** Designing a PBL Scenario using LePlanner. | 1. Demonstrate how to create PBL scenario using LePlanner. | |