S.T.E.A.M. Children Engineer Academy-Greek lesson plans

LESSON PLAN: 1st year -7th Lesson/Mar'18

TITLE	Pupils' preparation for a Treasure Hunt game using QR codes /Running a recipe, making a cake using tablets, QR codes and Google Keep
THEME	Science/Technology/Art/Engineering
GRADES	6 th Grades
DURATION	90'(2X45 minutes)
REALIA- MATERIAS	 Truffle ingredients Tablets QR Code Generator & QR Code Reader App Interactive board notes Google Keep App Google Docs Cahoots
OBJECTIVES	 Through the lesson, pupils will: Pupils will select their teams and every team will select "their chief" for the Treasure Hunt game. They will then be informed of the obligations and the duties of each team member. They will collaboratively work in teams using the tablets, in order to take part in the treasure hunt game. They will follow commands-steps in order to run the recipe. They will "read" the QR codes using their tablets for the

recipe running and finally share it on their Google Keep profile.

- 6. They will apply the instructions-comments of the recipe.
- 7. They will hear a recorded Google Keep command and apply it.
- 8. They will make the sweets working in a collaborative way.
- 9. They will take photos and store them on their Google Keep profiles, where they will be also visible by the Collaborator-Instructor.

DESCRIPTION

Pupils will select their teams, which is something that will prepare them for a collaborative cooperation. Then will also select their chief and be informed of the Treasure Hunt. They will "play" the Treasure Hunt using their tablets (Mobile Learning) and QR codes, in order to find the hidden ingredients for making a recipe. Through a game playing and an enjoyable way, they will try to solve the QR code riddles and find the recipe ingredients. Using their tablets and ICT will read the riddles hidden in the QR codes.

Following specific commands and instructions, they will work in teams and be taught in a game playing way, using at the same time technology, the basic fundamentals of the algorithms and the programming (Computational Thinking). Furthermore, they will use the Google Keep app and "upload" photos so there will be a direct feedback between the teacher and the pupils themselves

EVALUATION

Evaluation indicators:

At the end of this two-hour lessons teaching procedure, pupils will have comprehended the collaboration procedure through a PC (Computer Supported Collaborative Learning), and will participate in the Treasure Hunt game through Mobile Learning, following particular steps and achieving in this way their introduction into the meaning of the algorithms.

They will also have comprehended the basic fundamentals of the rule programming and will have their first aspect of the basic

commands/instructions of repetition and choice. They will have been acquainted with the QR codes technology and will simultaneously learn the Google Keep and Google Docs applications. Pupils will have worked in teams, using their mobile devices in a funny and innovative way discovering the Mobile Learning, in the context of CSCL (Computer Supported Collaborative Learning) which has been proven to offer multiple benefits to the teaching procedure, both at a cognitive level and at a collaboration quality level, among the pupils.

Finally, pupils will have collaboratively worked in a funny and innovative way.