



Lesson Plan “Platform Arduino - Cycles”

Topic: Platform Arduino and cycles

Subject: ICT

Target Group:

VET students, aged between 12 - 15.

Objectives:

Obj1. To provide a basic understanding of programming cycles in Arduino

Obj2. To explain the difference between a cycle which is used to describe a condition and a cycle which is used when you want to execute a certain set of statements a certain number of times

Obj3. To practice cycles in Arduino Platform

Approach/Methodology used: This lesson focuses on teaching VET students about programming cycles in Arduino. The teacher will use a PowerPoint presentation to lecture on the explanation of programming cycles in Arduino, showing different kind of cycles. Next, the students are involved in a problem-based learning activity where they put into practice what they have learnt.

Means/Tools/Educational technology

- A projector or interactive whiteboard and a computer with the software needed for running the PowerPoint presentation.
- Problem-based learning (PBL) template
- Computers and Arduino SW

Plan for work

Time	Activities	Methods/ means
10 min.	Use a PowerPoint presentation to introduce explanation of programming cycles in Arduino, showing different kind of cycles.	Lecture / Projector or interactive whiteboard
20 min.	Prepare the students for the problem-based activity. Form teams of 3-4 students, hand them the PBL template. Ask the teams to use Arduino SW. Supervise and support the teams while they are programming in Arduino SW.	Collaborative work; PC/Arduino SW / PBL template



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15 min.	Ask the teams to either present their results to the class or to another team.	Classroom discussion
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Assessment/Feedback:

The teacher will evaluate the results prepared by students as well as the presentations made by them in the last part of the lesson.

Bibliography:

- <https://www.arduino.cc/>