CLIL LESSON PLAN FOR SUBJECT: Robotics   **DEVELOPER:** Ioanna Ziaka

TOPIC: Familiarize learners with the use of the ultrasonic sensor/conditions/loops

GLOBAL GOAL: Use of the ultrasonic sensor with Lego Mindstorms ev3

AGE OF STUDENTS: 11-12   **LANGUAGE LEVEL : A1+**   **TIMING**: 90 min.

Aims
- Learn about the use of ultrasonic sensors in daily lives   - Understand conditions   - Familiarize with conditions inside conditions   - Understand/appreciate the use of technology for the performance of daily tasks   - Experiment with the action/flow control blocks

TEACHING OBJECTIVES   (What I plan to teach)

Content
- basic use of the ultrasonic sensor   - use of conditions   - use of loops

Cognition	Culture
- understanding how ultrasonic sensors work - understand the difference between ultrasonic and photoelectric sensors - explore functions of blocks - experiment with building a programme	- understand and appreciate the usefulness of modern technological innovations - understand applications of programming

Language and Communication	
Language *of* learning	**Language *for* learning**
key vocabulary: action, backward, display, sound, loop, switch, -sonic, photo-	- language to hypothesize, to justify, express problems, express different opinions - use of prefixes/suffixes for understanding meaning - language for note taking/writing

LEARNING OUTCOMES (What learners will be able to do by the end of the lesson/s)
By the end of the unit, the learners will be able to: - Have a basic understanding of conditions and loops   - Understand the usefulness/application of programming in everyday life   - Have a basic understanding of the function of several blocks (steering/moving backwards/loop, switch)   - Have a basic understanding of the use of the ultrasonic sensor

Assessment Methods/Tools
- show basic use of the blocks of loop/switch/applying backward movement/changing robot speed/using the display and sound blocks   - show basic understanding of how to start building a programme