A Holistic Approach to Digital World

Erasmus+ KA210-SCH Small-Scale Partnership

Lesson Plan

Day 5 of 5 — Debugging, Robot Show and Certification

Parent Activity	Scratch 3.0 and Lego Mindstorms EV3
Host School	ARISTOTELIO EKPEDEFTIRIO SERRON (Greece)
Participating Schools	Lycée des Métiers Jean PERRIN (France), Colegiul National "Spiru Haret" (Romania), KARAMAN ANADOLU LISESI (Türkiye)
Session Date (indicative)	17/04/2026
Duration	5 hours (incl. breaks)
Target Group	Secondary students (approx. 14–19) from all four partner schools, mixed nationality groups
Delivery Team	IT teacher, ARISTOTELIO EKPEDEFTIRIO SERRON (Greece), with all partner teachers present
Lesson Focus	Consolidation, systematic debugging, final demonstration, evaluation and certification

Learning Objectives

By the end of this session, students will be able to:

- Apply a systematic debugging strategy (isolate, test, fix, re-test) to resolve code issues
- Present and explain a completed robot/game project clearly to an international audience
- Give and receive constructive peer feedback on another team's project
- Reflect on personal learning progress by comparing pre- and post-activity survey results

Materials and Resources

- EV3 kits and laptops with Day 4 projects loaded
- Assessment rubric (functionality, creativity, teamwork, explanation quality)
- Post-activity coding-awareness survey forms
- Europass Certificate templates
- Camera for group photo / dissemination material

Lesson Procedure

Time	Stage / Activity	What Happens	Materials
09:00–10:15	**Debugging & Code Editing**	• Review a simple debugging strategy: isolate, test, fix, re-test • Teams resolve outstanding issues in their robot and/or game projects	EV3 kits, laptops
10:30–11:30	**Final Preparations**	• Teams rehearse their demonstration and short explanation • Peer feedback round: each team observes and comments on one other team	EV3 kits, laptops
11:45–13:00	**Robot Shows**	• Each mixed-nationality team presents and demonstrates its robot/ game and explains the code behind it • Assessment against the rubric: functionality, creativity, teamwork, explanation quality	EV3 kits, projector
13:00–13:30	**Post-Activity Survey**	• Students complete the post-activity coding-awareness survey • Quick group discussion comparing results with the Day 1 baseline	Survey forms
13:30–14:00	**Europass & Certificate Ceremony**	• Distribution of Europass documents and participation certificates • Group photo for dissemination purposes	Certificates

Differentiation and Inclusion

- Allow teams to choose how they present (live demo, short video, or both) to suit different comfort levels with public speaking
- Provide the rubric in advance so expectations are transparent to all students
- Ensure the presentation space is accessible and visible to all participants, including those with hearing or visual needs

Assessment / Evidence of Learning

- Final rubric score per team: functionality, creativity, teamwork, quality of explanation
- Completed post-activity survey compared against the Day 1 baseline to measure progress
- Europass Certificate of participation issued to every student

Teacher Notes and Follow-Up

- Compile photos, videos and completed rubrics immediately after the session for the project's dissemination and 'e-scenario' output
- Share final projects and this 5-day lesson-plan set with teachers who did not attend, for use in the Informatics Clubs at each partner school
- Archive survey results centrally so they can be compared with the results from the other three project activities at the end of the project