

LOGBOOK

BRING STEAM TO LIFE HOW TO BUILD A SCHOOL MAKERSPACE

ISTANBUL

24TH-28TH FEBRUARY 2025

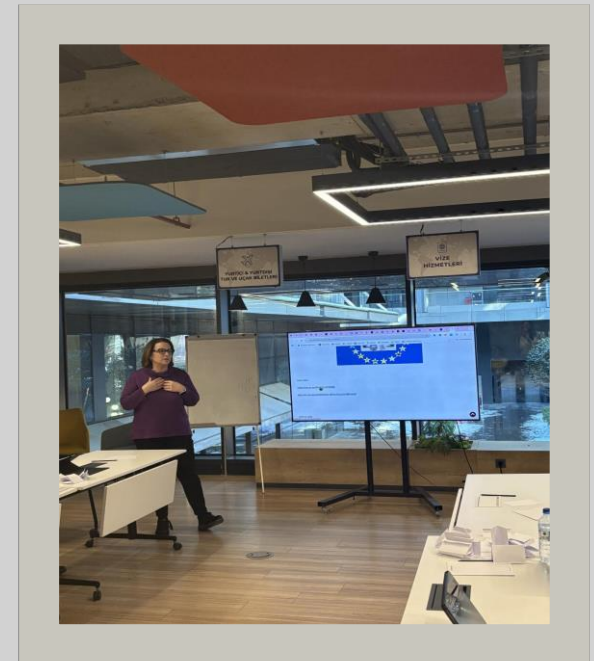
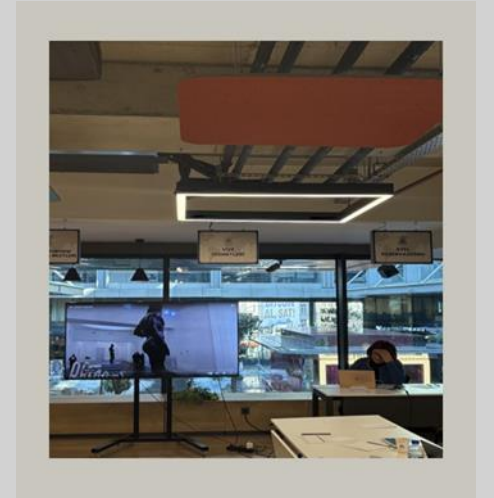
2024-1-IT02-KA121-SCH-000213329

Co-funded by the
Erasmus+ Programme
of the European Union



FIRST DAY

- The trainer Ms Yanella E.Ojeda introduced the main aim of the course asking us: “Why STE(A)M ?
- The approach combines theoretical knowledge with practical applications that encourages students to find solutions to real-world problems. This type of learning environment allows students to develop their communication, critical thinking, collaboration, and problem-solving skills.
- Icebreaking activities- the participants from Spain, France and Italy in mixed groups reported about the Education Systems in their countries and their sending institutions.



SECOND DAY

The difference between STEM AND STE(A)M

Creating a Project Based Learning Model

- Teachers work in team otherwise the Project Based Learning for schools doesn't work. Students make connections with disciplines and everything makes sense.
- **STEAM** Education is an approach to learning that uses Science, Technology, Engineering, Arts and Maths as access points for guiding students' inquiry, dialogue and critical thinking.
- Teachers work together, they propose a topic and then students find the solution to it and in this case they have a central role. The teacher is a **facilitator** of knowledge. The Assessment: It is done through a rubrica with criterias.
- The principal idea is that a project based learning must be done in class and each member has a role.
- Participants were divided into groups of different disciplines (Maths, PE, English, Law) to create a project that could be useful for the community. Before the activities the tutor showed some videos and documents on how a project based learning works.
- https://youtu.be/H7LHsL0iB_w
- <https://artsintegration.com/2022/06/17/steam-readiness-scale/>
- <https://docs.google.com/document/d/1merW3I2zAZye0ShGAJJCZ8Qw3J5239T2hUJiNWA5ybXg/edit?tab=t.0>
- <https://docs.google.com/document/d/1dahru9Z9dWfU0WNWVr4Rd8JEIHpRPPkyJoIWHz8PYLQ/edit?tab=t.0>
- <https://blog.acceleratelearning.com/measuring-the-impact-of-steam-education>



THIRD DAY

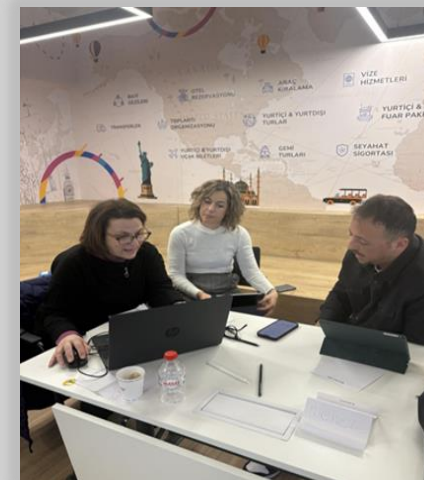
MAKERSPACES

Makerspaces are interdisciplinary hubs. Each group was assigned a different approach.

<https://youtu.be/IWHC7BpEtck?t=8>



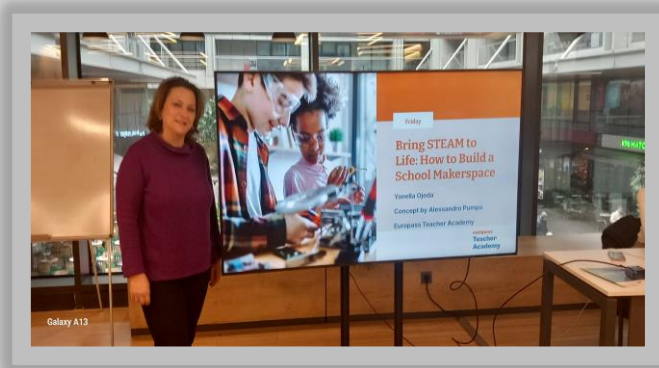
- **Inquiry- Based Learning** is a teaching method based on research, where students learn by asking questions, exploring, and discovering answers on their own, rather than receiving ready-made information from the teacher. During the IBL method students behave like scientific researchers;
- **Project-Based Learning** is an approach designed to give students the opportunity to develop knowledge and skills through engaging projects set around challenges and problems they may face in the real world;
- **Genius Hour** allows students the flexibility to choose a topic, research the content that is necessary to learn about their topic, and then solve a problem or present about a topic they are passionate about without the constraints of the typical teacher driven instructional time.
- **Design Thinking Project** is a mindset and approach to problem-solving and innovation anchored around human-centered design.



FOURTH DAY

STEAM PBL Project Design Criteria & Rubrics

- Working in groups participants continued working on projects introducing AI tools such as CHATGPT, GAMMA, DEEPSEEKING AND CLAUDE;
- The trainer explained how to create effective prompts using the CRAFT method: Context, Role, Action, Format and Target. It is useful to help users generate clear and concise instructions for the AI models .
- According to the trainer's prompts participants worked on them and shared their outcomes them with the other groups.
- <https://gamma.app/docs/Aqua-Experts-Exploradores-y-Guardianes-del-Agua-7vg6yzd4xqvrehj?mode=doc>
- <https://gamma.app/docs/Newtribox-A-STEAM-Project-for-Sustainable-Eating-9rg2eazssucw1d2?mode=doc>



FIFTH DAY ASSESSMENT



➤ All the participants created an authentic Maker Education Rubric.

Tips and Hints:

- Layout should have proper titles and subtitles.
- Web pages should look neat and organized.
- Remove template images and words and replace with your own
- Ensure users can see most of your page on their screen. Use appropriate white space, collapsible boxes, and embedded links to reduce your page size.
- Do not put personal phone numbers, addresses, or emails. You may put your Instagram link, but do not put anything that allows direct access to you.
- <https://www.edutopia.org/blog/creating-authentic-maker-education-rubric-lisa-yokana>
- <https://media.wakelet.com/docs/hBJaq6RwohfzktPdX5Q-O?sig=65a2d65265e08846df25bbcb685ae3b30a8e8e5944abfd55212aedb1a389b0eb>



Thanks for watching!



"This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

