



Guidelines for facilitating the learning of STEAME

Reference Number: 101102619

Module and Workshop Learning Plan

Module Number and Area/Topic: VR LEARNING ENVIRONMENT FOR STEAME PBL ACTIVITIES

Module leaders: UAegean

1. Introduction and broad description of the context and goal of the area/topic addressed with reference to the STEAME Teacher Facilitators Competence Framework for student and serving teachers

Frame VR offers a social virtual reality platform that empowers users to effortlessly craft immersive virtual environments enriched with multimedia elements. It facilitates seamless real-time interaction within these virtual realms, allowing remote users to explore them simultaneously. For educators seeking to establish immersive VR learning spaces without extensive technical expertise, Frame VR serves as an excellent entry point for creating immersive multiuser applications under the STEAME umbrella.

2. Learning objectives and learning outcomes with reference to the defined list of learning outcomes in the Competence framework

Upon completing this module, trainees will achieve the following:

- Recognize the specifications and capabilities of Frame VR.
- Comprehend the procedures involved in crafting virtual environments with Frame VR.
- Execute fundamental actions within Frame VR worlds.

3. Competences that are developed

- **Virtual World Creation:** Participants will learn how to design and develop environments using Frame VR, including integrating multimedia content and 3D models.
- **Real-Time Communication:** Participants will learn how to use real-time communication features within Frame VR to facilitate collaborative virtual reality learning environments.
- **Technical Proficiency:** The module will present the technical skills necessary to navigate and operate Frame VR effectively.
- **User Experience Design:** The module will introduce participants on user experience design principles in creating engaging and user-friendly virtual environments.

4. Content and Resources (providing information on the various constituents/ dimensions of the topic under consideration), including presenter's notes for guidelines of the workshops organisation

- PPT – introduction to Frame VR
- Videos – demonstration of Frame VR features/affordances.
- Applications – Frame VR virtual worlds

5. Methodology and approaches for the module training presentation and guidelines for workshops organisation

- Presentation of Frame VR features/affordances
- Presentation of basic features and world development
- Hands-on experience in Frame VR

6. Instruments/Tools/Supporting Materials/Resources to be used

PART 1	Introductory Activities (creation of interest, reference to real-world issues, relation to background and experiences, etc.)
Learning Objectives	Get familiar with Frame VR
Learning Outcomes	Introduction to Frame VR and Frame VR Spoke Platform.
Competences	Using Frame VR Rooms. Navigating through Frame VR Spoke Platform.
Content, Resources and Tools	PPT, Videos, Frame VR
Activities	Presentation of Frame VR Room and Spoke Platform functionality.
Estimated Time	20 mins

(add more Activity sections as needed)

PART 2	Development Activities
Learning Objectives	3D models integration into Frame VR. 2D Images integration into Frame VR. 2D Videos integration into Frame VR. Animated 3D models and Images integration into Frame VR.
Learning Outcomes	Creation of interactive immersive virtual reality learning environments.
Competences	Understanding of 3D models, 2D images, 2D videos, Animated 3D models, and Animated 2D images integration into virtual reality environments.
Content, Resources and Tools	PPT, Videos, Frame VR
Activities	Presentation of integration of 3D models and multimedia into Spoke Platform.
Estimated Time	20 mins

PART 3	Development Activities
Learning Objectives	Publishing and sharing virtual reality learning environments through Frame VR.
Learning Outcomes	Publishing virtual reality learning environments in Frame VR while considering technological limitations.

Competences	Polygon count recognition in Spoke platform. Generation and dissemination of virtual reality learning environments invitation links.
Content, Resources and Tools	PPT, Videos, Frame VR
Activities	Presentation of Frame VR virtual reality learning environments publishing and dissemination process.
Estimated Time	10 mins

7. Reflection and Closure activity

Discussion and summarization the usage of Frame VR.

Reflection on the Frame VR virtual reality learning environments design and development process.

Resolvance of queries on Frame VR and Mozilla Spoke platform functionality.