Learning scenario with MARG

PART 1: General information

Title of the scenario:	The gold mine in Psinthos	
Keywords:	gold mine pollution natural resources environmental issue decision-making social groups	
Name(s) of the scenario's creator(s):	Filippos Tzortzoglou	
Creative Commons License **of the scenario:**	Attribution ☐	Attribution-NoDerivs ☐
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	Attribution-NonCommercial-ShareAlike ■	Attribution-NonCommercial-NoDerivs ☐
Estimated duration of the scenario's activities:	70 minutes	
Age range of learners:	10-13 years old	
Learners' special characteristics: (i.e. immigrants, special needs)	None	
Learning subject based on your curriculum to which the scenario relates:	Environmental education	
To which Sustainable Development Goal (s) does the scenario relate to : (highlight it/them)	{ } No Poverty	{ } Industry, Innovation and infrastructure
	{ } Zero Hunger	{ } Reduced Inequalities
	{ } Good Health and Well-Being	{ } Sustainable Cities and Communities
	{ } Quality Education	{X} Responsible Consumption and Production
	{ } Gender Equality	{ } Climate Action
	{ } Clean Water and Sanitation	{ } Life Below Water
	{ } Affordable and Clean Energy	{X} Life On Land
	{ } Decent Work and Economic Growth	{ } Peace, Justice and Strong Institutions
		{ } Partnerships For The Goals
Which 21st century skill(s) does the scenario involve: (highlight it/them)	{X} Information and data literacy	{X} Critical thinking
	{ } Communication	{X} Active citizenship
	{ } Collaboration	{ } Respect for differences
	{X} Problem solving	

PART 2: Learning outcomes of the scenario	
In terms of <u>knowledge</u>	The learner knows and understands: ✓ the environmental issues associated with an industrial gold mine ✓ the social and economic consequences associated with an industrial gold mine
In terms of <u>skills</u>	The learner is able to: ✓ organize information and manage it in order to form an opinion. ✓ adopt a critical attitude towards opinions around an issue ✓ sympathize others' point of view around an issue
In terms of <u>competences</u>	The learner: ✓ works and acts critically and in the best interest of the community. ✓ propose actions and plan actions to enable the sustainable development of such industrial installations.

PART 3: Description of the game	
Narrative description of the game plot:	Psinthos is a quiet mountain village of 1500 inhabitants in a very beautiful natural environment. Its inhabitants are mainly engaged in agriculture and animal husbandry. Lately, however, due to the economic difficulties, many residents are forced to abandon it. A multinational gold mining company decides to set up a mine near the village settlement. The residents are upset because they do not know the consequences of such an industrial installation. Players will chat with 4 different representatives. 1. The representative of the company 2. The representative of the farmers and stockbreeders of the region 3. A representative of an environmental organization 4. A representative of unemployed residents Each person has his own arguments for or against the creation of this mine. For each argument, the player may or may not vote for it, thus giving positive points or negative points to the mine decision. At the end of the game, depending on the arguments chosen for the decision, the mine will be built or not.
Game objectives:	The game aims to introduce players in discussions based on arguments and to present different opinions around such conflicting issues. Furthermore, it aims to encourage players to make informed decisions, but also to activate their participation in relevant decision-making processes. The learning object enables the user to take a stand in a dilemma in which many contradictory environmental, economic and social dimensions are involved. More specifically, the arguments developed by representatives of four social groups involved are put

	forward. The game allows the user to study all the arguments and choose which of them convinces him the most.
Does the scenario refer to a specific location? If yes, specify. If no, write everywhere.	Everywhere
Characters:	Representative of a multinational company, representative of farmers and stockbreeders, representative of an environmental organization, representative of unemployed residents
Scenes:	The described game consists of a basic scene in which players converse with the virtual characters.
Type of work: Individual/ collaboration	Students play the game in teams of three
Does the game involve different player roles? If yes, specify.	No

PART 4: Description of the learning scenario activities

	Learning settings	Estimated time
Before the game:	Students are given instructions about how to use mobile devices and how to play the MARG. They are divided in team of three players.	10′
During the game:	After completing the process, the teams - using the Taleblazer application - and the teacher's contribution, use the digital map and its content and then head to the points of interest, where they will talk to the representatives, virtual characters, mentioned above. By talking to each of them, they will learn their arguments, either for or against the creation of the mine. For every argument they hear, they will have the option of voting in favor or against it. In the end, depending on the number of arguments that have been voted in favor, the decision on the mine will be made. Point of interest 1 : <u>Representative of a multinational company</u> In this scene the students learn about the impact of an industrial installation of this kind on the economy and development of the region.	30′

	Point of interest 2 : Representative of farmers and stockbreeders In this scene the students learn about the impact of an industrial installation of this kind on areas of primary production. such as agriculture and animal husbandry. Point of interest 3: Representative of an environmental organization In this scene, students learn about the negative effects of an industrial installation of this kind on the environment, flora and fauna of the area. Point of interest 4: Representative of unemployed residents In this scene, the students learn about how the mine will positively affect the fight against unemployment in a region.	
After the game:	After all the necessary information has been collected and obtained, the final results of the vote shall follow. Each group shall communicate the results to the plenary of the class and shall justify the reasoning behind their vote.	30′
	Total:	70′

PART 5: Prerequisite knowledge and supportive material

Learners' prerequisite knowledge:	Basic knowledge of mobile device usage, basic knowledge about environmental problems related to life below water.
Infrastructure/ equipment needed for implementing the scenario:	Mobile devices with data-internet connectivity
Other learning resources needed:	None

PART 6: Approach towards the assessment of the learning outcomes

Learners' assessment approach:	Create collage with the arguments of each representative.