



Narodowe Centrum
Badań i Rozwoju



UNIwersytet
Warszawski

Scenario 3: Volcanic eruptions, earthquakes – tectonics-based disasters.

Brief description of the lesson	Based on the course of historical natural disasters, such as earthquakes, volcanic eruptions or tsunamis, students will learn about the consequences of these phenomena in the spatial, social, economic and natural aspect.
Objectives of the classes	The objective of the classes is to show students the spatial, social, economic and natural effects of such events as: volcanic eruptions, tsunamis, earthquakes.
Detailed objectives:	<ul style="list-style-type: none">- The aim of the classes is to show students the spatial, social, economic and natural effects of such events as: volcanic eruptions, tsunamis or earthquakes.- Presentation of the dynamics of the process of an earthquake, volcanic eruption or tsunami.- Analyzing how people who participated in such events coped with the reconstruction of their immediate neighborhood and the trauma after this type of event.- Making students aware that each of us must be physically and mentally / emotionally prepared for a natural disaster.
Messages: - the student knows and explains	Reminding students about the tectonic movements of the earth (causes and effects of phenomena such as volcanic eruptions, earthquakes, tsunamis). Getting students to know which regions of the world are most exposed to this type of phenomena.
Supplementing the information in the field of:	- The student is able to explain the effects of tectonics-based events (volcanic eruption, earthquake, tsunami) in the social, spatial, economic or natural aspect.
Method	- A short video - made in groups.
Time span	<ul style="list-style-type: none">- Completion time 90 -120 minutes- Presentation time 5 - 10 minutes
Aids	A projector and a computer.
Course of the lesson	<ul style="list-style-type: none">- Students choose a specific event:<ul style="list-style-type: none">a) volcanic eruption,b) earthquake,c) a tsunami that has occurred in recent years,- They receive aids from the teacher in the form of a press release on the event they have chosen (hence the need for a team of working students to select a specific event in advance). At home, using the Citadine website or other Internet sources, their task is to construct a video in the form of a 5-minute news about the event of their choice. <p>The video is to be informative and intended for a specific community (the target community depends on the choice of the student).</p> <p>The following components are to be included in the content of the video:</p> <ul style="list-style-type: none">- location of a given natural disaster,- exact date (it is important to specify it to-the-minute) when a given catastrophe occurred,- course of the event,- an interview with a person who experienced the event (it may be by playing out roles),- providing data on spatial damage, financial losses, victims and victims and possible environmental losses.- a curiosity about the event might be an additional advantage of the video.- if applicable, also specify what steps have been taken to prevent or reduce the effects before or after the occurrence of a given event (e.g., construction

	<p>of buildings with specific structures, specially developed systems warning local communities before the occurrence of a given event, etc.)</p> <p>At the very beginning of the lesson, the teacher reminds students of the basic information on the tectonic movements of the earth and the causes of volcanic eruptions, tsunamis and earthquakes, emphasizing the destructive role of these events and systems warning the population of its arrival. The students then present their videos to the class.</p>
Completion/ Summary	After the presentations, a short discussion on the presented works may be planned.
Resources	<p>Earthquake in Chile (2010): (resources on the Citadine website)</p> <p>Volcanic eruption in Chile (2008): (resources on Citadine website)</p>