



Narodowe Centrum
Badań i Rozwoju



UNIwersytet
Warszawski

Scenario 2: Types of natural disasters resulting from the intensification of climate change on Earth.

Brief description of the lesson	During the lesson, students will learn about the synergy between the phenomenon of climate change (which is often the result of the daily decisions of students and their families) and the consequences of this process affecting other communities.
Objectives of the classes	The objective of the classes is: - making students aware of the fact that decisions made at various levels of everyday life - national, self-governmental, local or personal, may have an impact on the intensification (or not) of climate change on earth and climate warming, and thus on changes in their everyday life the life and life of the community that do not influence these decisions (often living in other regions of the world).
Detailed objectives:	- Showing the relationship between decisions made at various levels of life (national, self-governmental, local or personal) on the living conditions of communities in different regions of the world. - Understanding how climate change - currently observed around the world - trigger the increase in the vulnerability of some areas of our globe to natural disasters.
Messages: - the student knows and explains	On the basis of the proposed literature, the student knows and explains such concepts as: a) climatic feedback, b) critical points, c) is able to assign the causes of climate change and their effects on the life of local communities in different regions of the globe.
Method	The student becomes familiar with the text: climatic feedback - do we have influence on in? The teacher explains to the students what is meant by the so-called "butterfly effect". The teacher starts a discussion on the climate changes that are observed in the world - as a result of human activity. The teacher concludes the lesson by presenting the history of the sinking islands in the atolls.
Time span	- length of the lesson: 45 minutes
Aids	- Colorful cards. - Colored felt-tip pens. - Adhesive tape.
Course of the lesson	- At home, students will get acquainted with the literature on the subject. - On colorful cards, the teacher writes down, in a slogan manner, the individual "feedback loops" (each separately) and the reasons for their formation. - During discussions, students attribute the cause and effect of climate feedback loops. "Pairs" of cards are stuck on the blackboard or wall with adhesive tape. - In the form of a discussion, students reflect on how at various decisive levels - the state, the city or the citizen - can eliminate the causes of these feedback loops. - At the end of the lesson, the teacher tells a story, for example, the sinking of islands in the atolls as a result of rising sea and ocean levels.
Completion/ Summary	Finally, the students take a photo of the exercise they have carried out. At home, they gather more information on the effects of climate feedback loops and their impact on rising sea and ocean levels in the world.

Bibliography	<p>Kotowski W., Kardaś A., 2021, Klimatyczne sprzężenia zwrotne– czy mamy na nie wpływ?, [w:] Budziszewska M., Kardaś A., Bohdanowicz Z., (red.) "Klimatyczne ABC. Interdyscyplinarne podstawy współczesnej wiedzy o zmianie klimatu", Wydawnictwa Uniwersytetu Warszawskiego</p> <p>Kardaś A., Malinowski Sz., 2021, Od czego zależy temperatura Ziemi?, [w:] Budziszewska M., Kardaś A., Bohdanowicz Z., (red.) "Klimatyczne ABC. Interdyscyplinarne podstawy współczesnej wiedzy o zmianie klimatu", Wydawnictwa Uniwersytetu Warszawskiego</p>
Online references	<p>https://drive.google.com/file/d/1y6XGJ47W7vankJuTgWAP07QNd4Ju8hvz/view</p> <p>http://wuw.pl/data/include/cms//Klimatyczne_ABC_Budziszewska_M_Kardas_A_Bohdanowicz_Z_red_2021.pdf?v=1610369447685 (Lesson 1)</p> <p>https://naukaoklimacie.pl/aktualnosci/o-co-chodzi-z-progiem-wzrostu-temperatury-o-2c-61</p> <p>https://naukaoklimacie.pl/aktualnosci/ziemia-stabilna-czy-cieplarniana-309</p> <p>https://www.focus.pl/artykul/tonace-kraje</p>