



## Students' Report Group 4 on E-learning and Flipped Classroom Activities (IO4)

**Students' names and surnames and class:**

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**Specific in-depth topic of own home study and why this topic has been chosen (at least 200 characters)**

Studied topics for discussion:

**What is water pollution?**

Water pollution is the contamination of water sources by substances which make the water unusable for consuming, cooking, cleaning and other activities.

**What is soil washing?**

Soil washing is a solvent-extraction process. It is used for removing contaminants from the soil using two processes: physical separation and chemical leaching by aqueous solutions.

**What is soil erosion and how does it affect the earth?**

Soil erosion is the loss of topsoil to wind, rain, and other forces is a natural process, but when intensified by human activity, it can have negative environmental, societal, and economic impacts.

**What is the main cause of water pollution?**

Water pollution is mainly caused by the global warming, deforestation, industry, agriculture, livestock farming, rubbish and fecal water dumping.

**Do you think waste decomposes quicker in water or soil? Do you think there is even a difference?**



Waste decomposes quicker in soil because of the microorganisms, nutrients and moisture found in soil that causes brakeage in the waste.

**Can you think of any human-made pesticides that aren't harmful for soil but actually help it?**

Human made pesticides could be non-harmful if natural. Some of the natural alternatives used for pesticides that help the soil are neem leaf, salt spray, onion and garlic spray, eucalyptus oil and others.

**What are the causes of water pollution in nature?**

The most important causes of water pollution in nature are the fluorine salts (fluorides), which is the way this element is found in nature, and arsenic, a very common metalloid found in the atmosphere, the hydrosphere and the soil; there are other natural pollutants such as manganese, uranium, radon, cesium and lithium.

**Do you know any solutions to reduce soil degradation?**

Some solutions that could help to reduce soil degradation and help the nature are: curb industrial farming, bringing back the trees, stopping or limiting ploughing or simply leaving the land alone.

**Comment about the activity done at home (at least 300 characters)**

From four masterclasses we learned a lot about soil and water problems and learning at home was highly informative. We learned from videos and e – library. Educative videos were interesting and easy to understand. We preferred watching videos but the e – library was useful to us in the exams. The exams we were doing at home were easy and most of the questions we could have answered without watching the educational video again. The final test was similar to tests after masterclasses and it was an indicator of how much we learned. Activities done at home, videos and e-library, were interesting and the project had a very positive impact on us.

**Comment about the interactive activity in the classroom (at least 400 characters)**

In our classroom, we held an interactive activity on the theme of water pollution, its causes and consequences, as well as ways to prevent it. Each student came prepared with two questions related to the topic. Later we commented those questions and tried to answer them as well as we know without using any help from book or internet. At the end, the students that asked the question answered



everyone that commented on their questions and answered in a way they thought it was supposed to be answered. It turned out to be very productive and useful. We learned a lot about the topic and gained new perspectives on this very serious problem. Also, it was a lot of fun, as we were able to speak freely about our opinions and were able to debate them with our peers.