**No water - no life, no water - no peace**

Astronomers searching for life on other planets generally look for water. Water in the liquid state represents the basic for all life on our earth. Although 2/3 of the earth’ surface is covered with water, only 2.5 % are available potentially as freshwater and only 1/3 of that part as potential drinking water. Upon the World Water Week 2017 it was underlined that 770 – 880 million people of the world do not have any secure access to drinking water. In December 2017, the catholic organisation started their annual call for donations also under the topic “No life without water”. Moreover, the international solution of this drinking water problem will become fundamental for the future universal peace. [Symposia of World Water Week, 2017].

Of course, the rising sea levels may not be visible nowadays, however, climate change also goes hand in hand with increased extends of flooding all over the world, destroying houses and infrastructures. “So much water and nothing to drink” a speaker of the World Water Week Symposium citing an affected person. The affected regions have to be supplied with bottled water by helping organisations. The consequence: A rising amount of plastic bottles, to support another current global problem, i.e. the plastic pollution of the oceans.

To look at this problem from different perspectives, six schools that are located at different seas and in different areas of Europe have come together to take a deeper look into such an important and multifaceted topic. The project will consist of different modules with each school specializing in a different topic, thus becoming an expert in this topic. During the mobilities activities will focus on that topic and after the mobilities, each school performs a follow-up course and compares the results to the situation in their country. The expert groups will be as follows: Germany - climate change and virtual water, Italy - water in art and literature, the importance of water for peace on earth, Turkey - energy gained from water, water purification, Portugal - water and tourism, UK - water and economy, Norway - microplastic in the sea and on the coast.

Additionally, each school analysis water samples of their own area according to agreed methods each year and puts the results into a database. Thus, we diskuss at the end of the project whether there has been a change - to the better or the worth - and whether programmes introduced by the governments work. Furthermore surveys are going to be designed and conducted at several stages of the project in which the inhabitants of the towns interviewed. Evaluating these surveys we want to find out whether the awarness of a need of sustainable water use has changed within the three years of the project and whether campaigns show success or not. We also want the students to start their own campaigns to increase awarness among their fellow students and the wider community (website, blog, social media challenge, petition, designing and producing coffee-to-go cups, designing lables for local companies that produce bottled water, ... - depending on the students' own ideas).

The overall outcome of the project is going to be a jointly written scientific report that coveres all the different facets as well as art exhibitions and digital products (blog, web-site, ...)

**Project objectives**

The main goal of the project is to make students aware of a sustainable usage of the resource water which is the basic of life on earth. They will learn the global importance of that topic as well as their personal consternation as peace on earth in future will also be a question of water supply. Upon the project they should change their own behaviour concerning water wastage but also stand up for a general sustainable usage. At the end they shall spread their knowledge to make more people aware of the problem.To be able to look closely into the multifaceted topic of the project, each school is going to focus on a different topic and will become expert on that one and share their knowledge with the other participants. During mobilities the partners organise activities related to their topic. After the mobilities each school carry out subsequent works and compare the results to their locality. To reach that goal the expert groups carry out research to understand the essence of the following topics:

\* Global availability of drinking water and its importance for peace (Italy)

\* Water in art and literature (Italy)

\* Interdependence of climate change and global water availability (Germany)

\* Sewage purification, drinking water abstraction/ water supply (Turkey)

\* Gaining power from water (Turkey)

\* Microplastic in the sea (Norway)

\* Economical aspects of water (harbour, pollution by ships, ...) (UK)

\* Water and tourism (Portugal)

To understand these the students have to learn about the following topics. Thus, all groups work on the following topics in between the mobilities:

\* Water cycle

\* Water supply plant

\* Rain gauge

\* Effect of climate change on water bodies

\* Sewage and purification plants

\* Melting process of icebergs due to global change

\* Comparison of water usage in different countries

\* Survey on water usage and awareness about importance of water in our lives

\* Physical and chemical properties of water

\* Taking and analysis of water samples from their localities. The results will be added to da database that will be set up by the school in Portugal.

\* Supply of water to the rivers by rainfall, occurrence of floods

\* Comparison of water as a habitat (wadden sea, rivers, the North Sea, the Black Sea, inland lakes...) depending on the local conditions.

The overall aim of the project is to collaboratively write one scientific report (EPUB) and design a website covering the various aspects of the topic water. These will contain the outcomes of the comparison of water as a habitat, water sample analysis, findings of the expert groups and surveys on water usage.We aim to design, produce and distribute reusable coffee to go cups and to reduce plastic used in packing. Additionally there we will produce flyers to create awareness about the importance of a sustainable use of the resource water as well as art exhibitions. Activities that prove to be successful will be implemented in the schools' curricula in various subjects and year groups.

**The project coordinator**: Fatma Genç