



Project description

The Baltic Sea Project is a new school project at Vilhelm Mobergsgymnasiet and is introduced in 2011 in cooperation with the upper secondary school “Zespół Szkół Ponadgimnazjalnych nr 2 im. Elizy Orzeszkowej” in Bartoszyce, Poland – a twin town of Emmaboda.

The mutual project focuses on the urgent problems with which the environment of the Baltic Sea is struggling today. It is verified that increased knowledge is needed not only when it comes to the causes of the environmental problems but also how these issues are connected to our way of life, our lifestyle and how we plan our society. In order to facilitate international cooperation increased knowledge about neighbouring countries and their culture also is essential.

The project is launched as a European Union project with the aim of increasing the environmental awareness among students in the Baltic Sea region and covers environmental issues specified in four fields with adequate problems, such as

1. Shipping and environmental pollution
 - Is sea traffic more intense than before and what needs control this?
 - What demands do cargo-ship production, and other carriers, meet in the different countries in the region?
 - What does the pollution consist of and who is responsible for the dumping of this?
 - How is the sea environment affected by pollution?
 - What kind of toxic substances are in question and why are they a danger to both sea organism as well as consumers?
 - What does Swedish as well as international laws, regulations and conventions say?
2. Fishing and cod population
 - How does fish population change over time?
 - What species are considered to be economically important and what species are threatened?
 - How are endemic sea organisms and fish affected by alien species?
 - What is needed for good reproduction of fish population?
 - Are predatory animals important in order to affect fish population?
 - What environmental demands must be fulfilled in order to secure survival for cod?
 - Is there a future in fishing for the local population of the Baltic Sea area?
 - What consequences does overfishing have within the jurisdiction of the EU?
3. Eutrophication and lack of oxygen on the sea bed
 - Why are we talking so much about this today, compared with earlier days?
 - Where do fertilizing substances come from and what organisms thrive from them?
 - What measures need to be taken in order to put a brake on and prevent the effects?
 - What is the cause of lack of oxygen?
 - How are sea organisms affected and what genetic effects are at risk?
 - How does climate change affect the sea?
 - What are the international agreements on this issue?

4. Algal bloom and possibilities for natural gas production
 - What promotes growth of specific algal species and why this blooming in spring?
 - How are coastal zones affected environmentally and tourism economically?
 - How does the greenhouse effect contribute to the problems?
 - Does gas production have a future as a source of energy?
 - What measures need to be taken in order to reduce the effects?
 - How are surveillance and transferring of information effected over vast sea surfaces between the countries of the region?
5. Individual or general choice – How does the sea function?

The aim of this project is

- To increase students' awareness in order to be enabled to take a stand in environmental issues and with help of their knowledge and experience be able to argue in favour of their opinions.
- To increase students' awareness of the condition of their local environment and understanding of the diversified scientific, cultural and social interdependence between people and nature.
- To develop students' ability to observe environmental changes
- To encourage students to participate in developing a sustainable future.
- To increase both students' and teachers' knowledge and experience in the culture of other countries and ability to participate in international cooperation.

Within the project there is furthermore an ambition that teaching in the field of environmental issues can develop, considering that

- Teaching in this area is not only about science but also economy, culture, history, politics etcetera.
- The teaching should develop the student's ability to take an active part in the solving of environmental problems.

Method

- Contacts between students are created via internet and students participating in the project develop a network based on chat programmes, facebook, e-mail etcetera.
- Communication language is English.
- In this project 14 Swedish and 14 Polish students take part. Primarily the students are studying natural sciences but other study programmes may also be involved.
- The students of each school are divided into groups of 3 or 4 students per field of interest and spend approximately 30 minutes each week work (flexibly) with their fields of study and stay in touch with each other through the internet.
- The students' work is supervised by teachers who support their students with the material required.

- Within the project the Swedish students will make a field trip to the Polish Baltic Sea coast and the Polish students will under similar conditions get acquainted with the Öland and Kalmar coastal region, during late summer/early autumn 2011.
- In order to bring the project to life the field trips to Sweden and Poland respectively will be documented by students with a genuine interest in film and media.
- The work of the groups will be compiled into one document and appropriately presented to the schools and other interested parties.
- The final document will also be presented as a European Union document, in Brussels.
- The project will be rounded off by a delegation of representatives from each school respectively planting a “tree of knowledge” at the schools.
- The project will run for the two terms of 2011 and estimated working time for the students will be around 60 hours.