

ADAPTING? OR EFFECTING CHANGE?

Institute: Közgazdasági Politechnikum Alternatív Gimnázium, Budapest

Student team: 9th grade

Project managers: Ágota Somogyi and Zsuzsa Oláhné Nádasdi

THE PROJECT

THEME: THE EFFECTS OF GLOBAL WARMING ON OUR LIVES

At the beginning of the project, students will revise individually what they have learned about the greenhouse effect, and collect data and information on the phenomena supporting the existence of a global climate change. After a team brainstorming session, students will select the themes they would like to work on. They will form groups to work on the theme they chose from the ones that received the most votes. Each group will create a work plan, which they will present to the entire team, who will contribute to the group's work by giving suggestions and constructive criticism. The finished products will be presented to the other students during various activities.

Developmental Aims:

Our aim is to enable students to apply their knowledge of the greenhouse effect and to coherently explain and demonstrate the importance of understanding the process based on their research. After finishing the project, they should be able to explain and support with data the connection between the global climate change and carbon dioxide emissions. They should be able to evaluate models and examples and to find what choices they can make in their own lives. They should be able to choose and utilize the right tools for organizing, sharing and presenting information. They can use the team's collective knowledge while coordinating class activities.

Concrete Aims:

Presenting the various possible ways in which the global climate change might affect our future lifestyle by means of an interactive exhibition or class.

REALIZATION OF THE PROJECT

In mid-January 2016, we announced a project for 9th-year students, entitled *Adapting? Or effecting change?* with the following description:

“Dear Students

On Wednesday, Thursday and Friday next week we would like to organize a program entitled Adapting? Or effecting change? During the program, we will first get familiar with the results of climate change research, then we will look for possible ways in which it can affect our lifestyle in the future. We will present our findings to the other Poli students at an interactive exhibition. Although most of the project will be completed during school time, you will also have to do some work at home. Independence, creativity, cooperation, the desire for knowledge and the readiness to keep records throughout the process are all necessary for a successful collaboration. If you are interested in the theme and would like to participate, please follow the link below to sign up before 18 January:

<https://goo.gl/forms/5qtKXwB1cb7C2I3D3>

Ágota, Zsuzsa and Dorka”

18 students signed up, 16 of them participated throughout all three days of the project.

DAY 1 (25 JANUARY)

In the morning, students researched the subject individually to bring their knowledge of the greenhouse effect and the facts supporting the existence of the climate change to the same level as others’. We used

The screenshot shows a mobile application interface for a lesson plan. The title is "Alkalmazkodás? Változtatás?". The main heading is "Az üvegházhatás". Below the heading, there is a list of resources and activities:

- 1. Üvegházgázok, az üvegházhatás molekuláris magyarázata, a szén-dioxid mennyiségének változása a légkörben
- interaktív szimulációk
 - <http://tananyag.geomatech.hu/material/simple/id/469755>
 - /files/3326046/greenhouse_hu.jar
 - <http://tananyag.geomatech.hu/material/simple/id/469721>
- szimuláció
 - <http://earthguide.ucsd.edu/earthguide/diagrams/greenhouse/>
- film, adatok
 - http://climate.nasa.gov/climate_resources/142/
 - http://climate.nasa.gov/climate_resources/139/
- 2. Az üvegházgázok hatása
 - <http://tananyag.geomatech.hu/material/simple/id/469743>
- 3. NASA honlap adatai
 - <http://climate.nasa.gov/evidence/>

<https://www.politechnikum.neolms.com/> as the team’s online platform, where we uploaded the resource materials. Students tested their knowledge independently, with the help of an online test. After the selfevaluation, they continued their work.

After a team brainstorming session, students formed three groups based on the topics they found the most interesting. Each group chose their own method, decided what product they wanted to create and how they wanted to divide the work among themselves.

DAY 2 (26 JANUARY)

The groups presented their ideas and their current progress. They offered each other constructive criticism and tried to find connections between their projects to make them more unified. Cooperation between the groups was not perfectly smooth, but, since everyone was willing to work together, in the end, they managed to resolve conflicts.

One of the groups aimed to bring about an actual change at our school, which they expected to achieve through the promotion and realization of waste sorting. They made two campaign films and a prezi.

The other group wanted to explore the possibilities of an environmentally conscious future. They collected information on the subject and made a prezi.

The last group wanted to create a website and an application to display the finished products and to collect and write articles about environmentally conscious consumption.



DAY 3 (27 JANUARY)

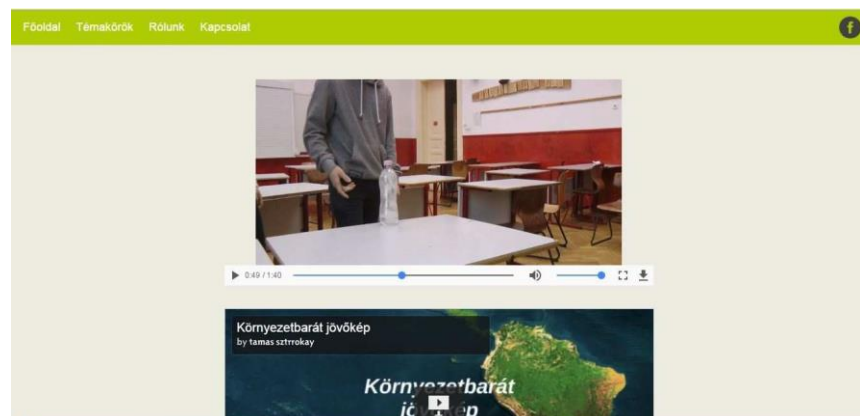
By the end of the third day, the base of the products was finished, and everyone chose a task they would work on at home. We decided to have a 60-minute class on 10 February, at the school's talent day, where we present our products, promote change, create useful objects from waste, and recruit students to our team.

PROJECT DIARY

In our team, which we later named GreenStep, we spent the first day researching and looking for information about global climate change. Then we sat down to think about the possible products we could create based on the information we had collected. The team divided into three smaller groups that worked independently and realized their own ideas.

FIRST GROUP

We decided to make a website that would bring together all the other projects



(www.greenstep.poli.hu). It took us a while to finish it; the initial idea has gone through many changes, due to the legal and other issues we encountered. Originally, we wanted to create an app to inform people about smarter

agricultural methods, but finally, we decided to make a website and transfer the data to an application from that website.

We divided the tasks between the members of the group – some wrote articles for the website, others edited the site, and yet others created the app. There was a lot of work to do, but we successfully managed our time, and we kept working even after the end of the three-day long program.

In the end, we managed to realize what we had envisioned, and we learned a lot during the process.

We managed to work together successfully on the project, and we became more invested in the cause ourselves. For example, we pay more attention to waste sorting in our everyday lives than we used to before. The shortage of time was probably the only problem that hindered us: we feel that if we had a few more days, our product would have been a little more polished.

SECOND GROUP

Our topic was waste sorting. We first made a poster; then in the following days, we shot two short movies, which aimed to raise awareness of the importance of waste sorting. Working as a team was at times difficult; sometimes there were conflicts within the group, but we managed to resolve them in the end.



We learned a lot about waste sorting and how waste management is connected to the fight against global warming. Two students worked on the poster, using the information that had been collected by all members of the group. The script of the short movie *The Life of a Bottle* was also made by two students, but many others participated in the actual shooting. The other short movie, which is shorter and more concise, was made by three students. I think everyone enjoyed the project because we have learned a lot about climate change and by the end, we really became a team.

We should probably work a little more on our accuracy. Many times, I felt that someone wanted to use new information in the short movies or on the poster before doing any more research on the subject.

THIRD GROUP

We were mainly interested in developing an environmentally friendly lifestyle, so we decided to make a prezi where we show what our environment will look like in 15 years. We had some disagreements concerning the structure of the slideshow. We ended up making two prezis and decided to display one of them on the website and use the other during activities.

While researching, we discovered that many of our ideas had already been realized or can be realized.

I think we could work on our cooperation; it happened often that everyone refused to listen to anyone's ideas but their own.

Finally, on Friday, 10 February, we made an hour-long presentation about our project. We were inspired by the favorable reception and success, and we gladly agreed to give an interactive presentation to a 7th grade class.

During these presentations, we showed the audience our works, the website, and the application, then we asked students to help us create statues from waste for an exhibition.



SCIENCE FAIR IN SZEGED



On 15 February, a group consisting of three students accompanied by two teachers presented the project at the Science Fair in Szeged.

Since our project has been quite successful, we hope that we can make more presentations at our school and even outside our school.