

Field Report Benidorm

MONDAY

Day 1, the 25th of October 2021

In the morning after breakfast at 7 o'clock till half past 7 we made our way to meet our partners, Spanish and Portuguese students at their school. Some nice policemen helped us crossing the street on our way.

We were welcomed warmly by the teachers who gave us a brief tour through their schools ground floor and a very nice garden the students planted all by themselves. We also saw some very nice projects in the hallway.

Afterwards we sat down inside the class and listened to some nice welcoming words from all teachers, including the principal. Then we were parted into groups with four to five students from each country to collect some similarities about ourselves. We noticed that many students struggled with communicating since the language barrier was hard to get over.

However, after that we played a funny game where everyone had to pick the amount of toilet paper we usually use in one sitting. We then had to choose a partner of a different nationality and tell each other some fun facts. Depending on the amount of toilet paper we had to increase the amount of fun facts.

Then we worked in our international teams on the "Non Violent Communication" which is an approach to communication based on principles of nonviolence. This method is designed to increase empathy and aims to increase the quality of life. There are four steps to mind: observation, feelings, needs and requests.

After that workshop we took the bus to visit Faro del Albir, a two hour walk through the nature to visit a small white lighthouse at the top of the way. The tour guide showed us the biodiversity of the area by introducing us to a special kind of bird and a very endangered plants growing there. The view from the top was very nice. After that trip everyone was starving and dying of thirstiness. We then bought some apples and water.

An hour or so later we arrived at the Fuentes del Algar, the waterfalls in Algar and we had some time to relax a little, enjoy nature and take a swim or to eat something. We all had a fun time during these 2 and a half hours, still, the water was very cold.

We drove back to the hotel at around half past five. After our arrival we got to spend our



free time. Some of us went to a restaurant while some stayed in the hotel. At 23 o'clock we were all exhausted and went to sleep after a long day.

TUESDAY October 26, 2021

An awe-inspiring experience at the "Water Treatment Plant Center" in Edar

On Tuesday, October 26, 2021, we gathered for breakfast at 7:00 am. Once we were all ready, we took a bus to Edar. Upon arrival, we assembled and discussed the plan. Groups were formed, each consisting of Spaniards, Portuguese, and Germans.

We were introduced to the facility, starting with general information about the Treatment Center. An employee of the center explained the process of turning contaminated water (including feces and urine) into clean drinking water. Graphics illustrating the purification and filtration processes helped us better understand each step.

The aim of the treatment plant is to eliminate all the impurities that accumulate in the water, while trying to do so under optimal environmental conditions. In the area, there are two water treatment plants responsible for the entire water cycle of Alicante. The water is purified and reused, and waste is used in agriculture.

After the explanation of the plant's operation by the employee, we were taken on a tour and allowed to observe the various basins where purification takes place. Organic waste (feces) is absorbed by various microorganisms and circulation. We wore protective vests and goggles to guard against potential contamination.

The visit to the water treatment plant was very interesting, and we gained a lot of new insights.

A delightful experience at the "Olive Oil Artisan Factory" in Almazara

Following the visit to the water treatment plant, we took a 1.5-hour bus ride to the village of Almazara. The journey was quite exhausting. Upon arriving at the facility, we were divided into three smaller groups, each of which was led through the production process.

We learned about the journey from olive harvesting to the final oil product. The harvested olives were delivered using tractors. The first machine separated the olives from leaves and branches. They went through additional machines until only the best-suited olives remained.

A large press liquefied them and removed the pits. Centrifugal force separated the watery and fatty components. The final steps consisted of various filtering stations to ensure the best possible quality of the olive oil.

The conclusion was that we all got to taste fresh olive oil on delicious bread.

The visit to the olive oil factory was very interesting, and we learned how crucial olives are for many farmers in Spain as a local resource and how ecologically sustainable processing and marketing are possible. Some of the students even took olive oil as a souvenir to bring back home.

Afterward, we returned to the school and conducted another workshop on Nonviolent Communication. In our international groups, we focused on the perception of feelings and recorded them on large floor posters.

WEDNESDAY

On Wednesday the 27th of October we left at 7:30 in the morning by bus in the direction of Valencia.

After arriving in Valencia, the first half of the group went to the global Climate Change Center, Centro Cambio Climático, while the other half of the group visited l'Albufera.

At the global Change Center, the two staff members introduced our group to the topic of climate change by explaining the effects and origins of climate change through graphs and data.

This was an interactive lecture as our group was able to participate in the lecture through questions and answers.

Afterwards, we played a game in which two teams competed against each other.

Here, it was a matter of assigning, based on our intuition, various cards with actions, for example, the renunciation of meat or with the switch to green energy, to a count, where it is shown which action reduces the emission the most.

The two graphs created were then compared with the template and discussed.

After the comparison, we said goodbye to the staff and went to the beach to have some

lunch.



After the lunch we visited FISABIO, the Valencian research centre. We were separated in different groups: the Spanish ones, which had a Spanish speaking guide, and the Portuguese/German ones, which had two English-speaking guides. One for each group, so there were three groups at the end. Each group was shown three different stations in the research centre. The first one was a lab, where blood and other samples of human genetic (like hair, sperms, nails, pee etc) was separated in its individual components. So, blood was separated in blood plasma, white and red blood cells.

Furthermore, they've shown us, how they store the blood components: in big fridges with up to -80 degrees!

The second station was the genetic labours. Our guide explained that they do research on different illnesses, in different labours and that every labour is equipped differently. Especially the labour for Covid-19. She also showed us, which different machines they work with. And they are very expensive and very precious in their skills.

The third station was about investigations and research on pesticidal and/or contaminated food from the local region, and why it is important to find out, what it can do with our body and health.

All in all, it was very interesting, and we learned a lot of the human genetic and human body!

After the visit we drove back to the hotel and had dinner.



Sample from



Different measuring devices



This one shows, where DNA is presenting and in what sample of blood not.

THURSDAY

Alicante - The history of water

The 45 minute train ride brought us to Alicante. The driveway was pleasant and gave us a view of the beautiful landscape and the view of the blue sea.

The city of Alicante is located on the Mediterranean coast and is the capital of the province of the same name and the Costa Blanca. It was founded more than 3000 years ago, a city with a long history and right on the sea.

Once in the city, we were greeted directly with the history of Alicante and led to the Santa Barbara Castle. The climb to the castle was steep and long but the view was worth it. Santa Barbara Castle is located on Mount Benacantire, 166 meters above sea level. It is one of the largest Arab medieval fortresses in Spain and the most iconic building in the city. From the fortress you can enjoy a wonderful panoramic view of the city, the port and the coast.

Alicante is an area that is mostly semi-arid, with little rainfall and high temperatures. There is no river system and no large surface or groundwater reserves. Water scarcity is a major problem in Alicante. Indeed, it has had a negative impact on the city's social and economic development for a long time. The main reason for the lack of water is the climatic conditions.

The solution to this natural deficiency is to take in water from other locations or to store water from other systems that already require a planning, development and use concept and a complex water infrastructure. The main feature of the system is to find, collect and

store water from natural springs and wells, as well as surface water reserves from remote basins (such as the Tibera or the Tagus River).

The tap water comes from groundwater resources (approx. 30% of the supply), surface water from other regions (Taibilla and Tajo - Segura) and desalination plants. This combination makes it possible to meet the supply, although there is still a severe shortage.

Further and more detailed information about the water supply in Alicante can be found in the museum “museo de agua de alicante”.



FRIDAY, 29th October 2021

Our day began at 7:30 am with a shared breakfast at the hotel. Afterward, we took a bus, along with the Spanish and Portuguese students, to Torrevieja. There, we visited the Salinas de la Mata Park and had a guided tour. At 9:55 am, we were initially divided into three groups and entered the building, which provided fundamental information about the area, its characteristics, and inhabitants. Our group leader gave us a brief presentation and told us about the composition of the two lakes and their salt components. We also learned that the pink and green color of the water was due to the salt content and the algae present, and that the water surface served as a stopover for cormorants and a breeding ground for birds like flamingos. After that, we had until 10:10 am to explore the museum independently.

Following our wait for the other groups outside and learning a bit about hares and eucalyptus in the area, we embarked on a journey through the park. Initially, we reached a birdwatching hut, from which you could have a good view of the birds, but silence was essential. The park also featured many interesting and rare plant species, and we saw the canal from which the water surfaces were fed.

A special feature this year was that due to the pandemic and lockdowns, the birds were much less disturbed by people, and as a result, more birds stayed in the nature park for longer than in previous years.

After concluding the park tour, we returned to the bus, which took us to Santa Pola, from where we boarded a boat to Tarbarca Island at 1:00 pm. On the way there, we made a short stop at a beach (Guardamar del Segura), which is now off-limits due to the climate-induced rise in sea levels, making it too dangerous to access. The sea was encroaching on the beachfront houses, rendering them uninhabitable. Here, we also witnessed the clear effects of the climate crisis.

On Tarbarca Island, we had the opportunity to swim and snorkel, gaining an interesting insight into the unique biodiversity of the local underwater world. At 5:30 pm, we returned by boat, and at 6:00 pm, our bus took us back to the hotel.

As a conclusion to the day and our trip, as it was our last evening, we went out to eat together.