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## Studytrip BioLearn

From the 22nd until the 25<sup>th</sup> of February 2020, 30 teachers from Hungary, Slovakia, Czech Republic and The United Kingdom came to The Netherlands as part of the BioLearn project. BioLearn is an educational approach in which students ages 12-16 learn how to use nature as a source of inspiration for different design challenges. Together with the teachers we experienced what we can learn from nature when it comes to designing the world around us, and what this could mean for education.

### *Day 1 – Saturday February 22*

On the first day of the study trip, we welcomed the teachers in our venue in Wijk aan Zee: natuurvriendenhuis De Banjaert. This accommodation is especially suitable for people who value nature, so we were very happy to stay in this beautiful venue.



After lunch, Eva Neumayer and Bowine Wijffels, both members of the BioLearn team, welcomed the teachers on behalf of the BioLearn project group. They gave the participants a quick overview of the study trip program and a short introduction to biomimicry in education. After this brief introduction, the teachers were divided in two groups and started two different workshops.

One workshop was given by Jasper Pijnenburg, a teacher at Ivo Secondary School in Deurne. He is an experienced biomimicry teacher and gave our teachers an insight in his day-to-day teaching practice at a Dutch secondary school.



The second workshop was given by Bowine and Denise Groeneweg from biomimicryNL, the Dutch partner in the BioLearn project. They discovered what we can learn from the sea when it comes to designing a swimsuit. As an introduction to biomimicry, they went outside with blindfolds on to search for different functions in nature. Being able to identify a function is a very important skill in biomimicry, and this was a good exercise to practice that skill!

The first day ended with a presentation of Lydia Fraaije, a biomimicry architect in The Netherlands. She explained how her work as an architect is influenced by principles in nature, and how she became inspired to incorporate nature in her work.



### *Day 2 – Sunday February 23*

After an early breakfast, the whole group went to a farm called Zorgvrij in Spaarnwoude. This farm serves as an information center of the Spaarnwoude recreational area. At the farm you can pet cows, tap milk, make cheese and find a special exhibition on biomimicry! Young and old can see and experience what life on an organic dairy farm entails. Once the group arrived at the farm, we split up in three groups to take part in three different workshops.

The first workshop included a tour around the farm and a visit to the biomimicry exposition and was given by Karin Drijver from Zorgvrij. The second workshop was focused on educational resources around biomimicry they use often at Zorgvrij, given by Erica Middelkoop. The third workshop was given by Matthijs Roobeek and Denise, who made a BioLearn module on designing a city park in The Netherlands. The teachers were the first to try this module out and were able to provide helpful feedback so



we can further improve our BioLearn modules.



After a typical Dutch lunch provided by Zorgvrij, we went back to Wijk aan Zee for a workshop provided by Sam Stier. Sam is our BioLearn partner from the USA, and he has a

lot of experience with biomimicry in education. His workshop, 'the tutelage of trees', showed the teachers some practical examples of activities they can do in a classroom together with their students.

### *Day 3 – Monday February 24*

In the morning of the third day of our studytrip, the teachers went through the teaching modules we created so far for the BioLearn project. It was very helpful to get their feedback on how workable the modules are at this point. The teachers also provided feedback on what they would like to see in a teacher training and what they would like to see on our website.





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In the afternoon, we were joined by Monica Petter from 'De Verbinding', and Hans Bezemer and Perry Vrolijk who are both teachers in Dutch Secondary Schools. They all have a lot of experience with teaching biomimicry, but they use a different approach. We noticed that teachers enjoyed seeing different examples of how you can do biomimicry together with students.

At the end of the day, the whole group experienced a very rainy walk in the dunes together with a ranger. The ranger showed us the local ecosystem and pointed out some very clever and unique adaptations that can be found in the dune area.

### *Day 4 – Tuesday February 25*

On our final day, we made two different excursions. In the morning we were welcomed by Brigit Kuijpers at 'The Green House' in Amersfoort. The Green House is a local environmental education center in the city of Amersfoort. They mostly focus on primary schools but they do have projects for secondary schools. Brigit showed us what their approach is when it comes to environmental education in The Netherlands, and the teachers were able to explore the beautiful area.



In the afternoon we went to visit Interface. Interface is a worldwide carpet factory that mainly focusses on the business market. Interface is leading in sustainable production (mission zero and mission take back) and applies biomimicry to the design of carpet tiles. We were welcomed by Geanne van Arkel, who has been in charge of the sustainable development of Interface NL for a long time.

This week has been incredibly inspirational for us. It is very unique to have such a big and diverse group of teachers together, exchanging their views and experiences with education in their own countries. How different our education systems may be, we were able to connect because of our shared love for nature and providing good education for our students. We want to thank all the participants in the studytrip for their hard work and positive contributions to our BioLearn project!

For more information or questions about the project, please visit <https://biolearn.eu> or email Bowine Wijffels at [bowine@biomimicrynl.org](mailto:bowine@biomimicrynl.org).

