

Task #2b: Bio-logic!

Study Other Species at Your School.

Task #2b is divided into two subtasks for students:

- 2.1 Planning To Study Other Species and Studying Them
- 2.2 Organizing and Presenting the Results

We normally perceive the school as a place for students, teachers, books and computers, wisdom, and bright ideas. Yet, the school – a building with a yard or surroundings – is also a habitat. It is mostly used by people, but if you take a careful look, you might spot other species as well: there are birds and insects in the schoolyard, maybe even squirrels, and an occasional neighbourhood cat. Spiders probably live somewhere in the house, and there could be a birdnest in the attic. There is a variety of flora to discover inside and outside the building. The school also has its own metabolic cycles, just like nature. These can be interesting to examine. Where does the dust come from and where does the garbage go? How are supplies brought to the school canteen and what happens to the leftover food? How many packs of paper does the printer swallow in one month?

2.1 Planning To Study Other Species and Studying Them

The aim of the first part of the task is to identify a topic to be studied in more detail. In general, we are interested in the different species that can be found in the building and in the surrounding environment. How many can you identify? Which are they?

Here it is important to figure out what is feasible for the students. It might help to consult with a biology teacher to find out what has been studied recently and to get some instructions on how the young researchers can study their environment without posing a threat to biodiversity.

Some potential research topics:

- different species inside our school building and in the environment around it
- different plant species in our school (make a distinction between indoor and outdoor plants)
- all the species living in our schoolhouse (inside the building, on the roof, or on the construction)
- recycling in our school
- the food cycle in our school
- ...



The topics above can be combined and formulated differently and new ones can be added. Some examples on how to plan the research:

If the aim is to map different plant species present in the schoolyard, you can mark a square on grass and try to identify every plant inside it. If a square metre is too much work, mark a smaller square. Discuss how to present the results, such as whether to pick samples of different species and organize them on a big, white sheet of paper, or to photograph them one by one and make a photo catalogue? Maybe it is a good idea to mark plants with a small label in their natural habitat instead of uprooting them? To keep the workload manageable, you might agree on identifying the plants by their colloquial names, rather than opting for the exact scientific nomenclature?

Alternatively, you can carry out this task in a simpler way by taking the time to tour the schoolyard and identify the most common plants based on subjective observation. The results should be written down, photographed, sketched, or collected as samples. It may be more challenging to research the animals living in the school. At first, it may seem that there aren't any animals living in the building at all. That certainly isn't true – keep searching and you'll find them. Insects are animals as well. You can also try to observe one chosen animal. What is it doing? Where does it move about? What is its life like? Try to capture the animal in a photograph. To get some useful advice, talk to somebody responsible for the maintenance of the school building, such as a cleaner or caretaker, for instance. They may have noticed some animals around in the course of their duties.

For someone that is not interested in ethology or taxonomy, investigating the waste cycle of the school could be a good task. How many dustbins are there in the building? Is it feasible to count all of them one by one, precisely, or is it possible to estimate somehow? (This applies mostly if there is one dustbin per classroom; thus, in knowing the number of classes you already have much of the counting done). Where is the trash collected from all those bins? What is recycled? Where does the recycled trash go? Is it used for something? It is good to be precise when answering these questions – where is the waste collected in your neighbourhood and what is or could be made of the recycled materials locally?

2.2 Organizing and Presenting the Results

Consider how to present the observation results to other participants in a clear and interesting way. To make it look more engaging, organize the collected information wittily: compile a nice photo gallery or a collection of sketches, write an abstract highlighting the most peculiar discoveries, and draw easily comprehensible schemes. Here, success is not necessarily determined by the length of the list of the species (although this could impress as well!). Which tools can be utilized to convince people that biodiversity is also worth recognizing in the school? Perhaps you found an outstanding spider's web? Maybe the neighbourhood cat turns out to be an exceptional character? Or you found grass from the schoolyard, as it may be. Use your ingenuity to appreciate other species living next to us! (See the examples below).



A Few More Notes

1. Avoid embellishing the information when presenting the results. An embellishment is empty information that blurs the meaning instead of conveying it. How to highlight the most important bits of the information to pass on the essence of it? See some examples on the next page.
2. Research a lot, but when presenting to others, keep it simple. One powerful image (a sketch, scheme, photograph, or photo series) accompanied by a short summary of the process works better than cluttering too much unprocessed information.
3. Keep notes of your research and discoveries. Document the results of the observations, experiments, and tested thoughts, ideas, and revelations uncovered in the process. It is good to look back at these when proceeding with the next tasks!

Have fun exploring!

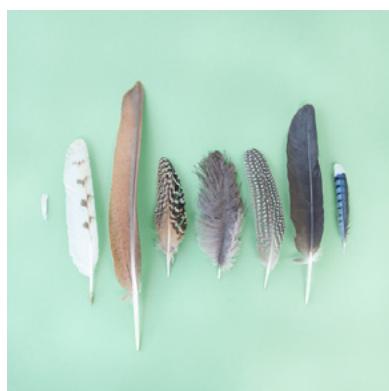
Examples of interesting ways to present the information:

Example #1

Arrangements by American photographer Emily Blincoe

www.emilyblincoe.com/arrangements

One of Emily Blincoe's favorite themes is organizing and photographing collections. Plants, finds, and small things lined up or otherwise composed highlight their diversity and peculiarities (more photos in the task folder.)



Example #2

Food deconstruction by Mikkel Jul Hvilshøj

www.hvilshoj.com/foodstyling

How could something as boring as a fried egg be pictured in an engaging and fresh manner? Danish advertising photographer Mikkel Jul Hvilshøj has an answer to that:



Example #3

Epic Bus Ad from Denmark (in Danish with English subtitles)

<https://www.youtube.com/watch?v=75F3CSZcCFs>

This humorous public transport advertisement is a good example of highlighting habitual everyday things as something extraordinary. (It is, of course, too voluminous a work to be comparable to what we are doing, but nevertheless a great inspiration for rethinking everyday life)

Video clips to complement the topic:

Although the following videos are not directly related to the task, they explain well what all of the above has to do with architecture.

Video #1

Piet Oudolf, a landscape architect from the Netherlands

<https://www.youtube.com/watch?v=Dujn2W-SQkM>

World-famous landscape architect and garden designer Piet Oudolf talks about his relationship to plants, his way of working with them, and the idiosyncrasies of landscape architecture: "The building made by the architect will remain as it is built. The brick does not grow, so the house can only age. But with plants time must be taken into account. When making a drawing, you must see the plant in all of its forms (How does it change in time? What happens to the plant in the spring, summer, autumn, or winter?)."

Video #2

The High Line

<https://vimeo.com/10053802>

High Line Park in New York is one of the most discussed works of landscape architecture in the past decade. The urban park, equally popular among locals and tourists, has a rich history – it is built on an old railroad bridge in Manhattan. Running above the streets and between the houses, slowly taken over by nature, the bridge had been abandoned by cargo trains already long ago and was destined for demolition. Luckily, a bunch of visionary people managed to convince the authorities that a boring piece of infrastructure could be converted into a miraculous park. The video illustrates the transformation of the railroad bridge. The vegetation of the park is once again planned by Piet Oudolf.

Video #3

Silk Pavilion

<https://vimeo.com/67177328>

In this future-oriented project, the architects are exploring silkworms with the help of computers: how are they building their cocoons and is it somehow possible to direct the weaving process? It turned out this could be the case, and to put the hypothesis to a test, the architects built a three-dimensional framework and had the silkworms weave the walls.

